HIGHWAY WORK PROPOSAL

Proposal Number: 2 5

Wisconsin Department of Transportation
DT1502 10/2010 s.66.29(7) Wis. Stats.

COUNTY	STATE PROJECT ID	FEDERAL PROJECT ID	PROJECT DESCRIPTION	HIGHWAY
La Crosse	7575-08-72	WISC 2016 414	Cass Street, City of La Crosse 4th Street to 7th Street	STH 16
La Crosse	7575-08-73		Cass Street, City of La Crosse 4th Street to 7th Street Water & Sanitary	STH 16

This proposal, submitted by the undersigned bidder to the Wisconsin Department of Transportation, is in accordance with the advertised request for proposals. The bidder is to furnish and deliver all materials, and to perform all work for the improvement of the designated project in the time specified, in accordance with the appended Proposal Requirements and Conditions.

Proposal Guaranty Required, $ 75,000.00 Payable to: Wisconsin Department of Transportation	Attach Proposal Guaranty on back of this PAGE.
Bid Submittal Due Date: November 8, 2016 Time (Local Time): 9:00 AM	Firm Name, Address, City, State, Zip Code **SAMPLE** **NOT FOR BIDDING PURPOSES**
Contract Completion Time One hundred five (105) Calendar Days	
Assigned Disadvantaged Business Enterprise Goal 5%	This contract is exempt from federal oversight.

This certifies that the undersigned bidder, duly sworn, is an authorized representative of the firm named above; that the bidder has examined and carefully prepared the bid from the plans, Highway Work Proposal, and all addenda, and has checked the same in detail before submitting this proposal or bid; and that the bidder or agents, officer, or employees have not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal bid.

Do not sign, notarize, or submit this Highway Work Proposal when submitting an electronic bid on the Internet.

Subscribed and sworn to before me this date _____

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State Wisconsin)

(Date Commission Expires)

Notary Seal

(Bidder Signature)

(Print or Type Bidder Name)

(Bidder Title)

For Department Use Only

Type of Work Concrete pavement, HMA pavement, curb and gutter, sidewalk, storm sewer, water main, sanitary sewer, base aggregate dense, traffic signals, street lighting, pavement marking and signing.	
Notice of Award Dated	Date Guaranty Returned

PLEASE ATTACH
PROPOSAL GUARANTY HERE

Effective with November 2007 Letting

PROPOSAL REQUIREMENTS AND CONDITIONS

The bidder, signing and submitting this proposal, agrees and declares as a condition thereof, to be bound by the following conditions and requirements.

If the bidder has a corporate relationship with the proposal design engineering company, the bidder declares that it did not obtain any facts, data, or other information related to this proposal from the design engineering company that was not available to all bidders.

The bidder declares that they have carefully examined the site of, and the proposal, plans, specifications and contract forms for the work contemplated, and it is assumed that the bidder has investigated and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the specifications, special provisions and contract. It is mutually agreed that submission of a proposal shall be considered conclusive evidence that the bidder has made such examination.

The bidder submits herewith a proposal guaranty in proper form and amount payable to the party as designated in the advertisement inviting proposals, to be retained by and become the property of the owner of the work in the event the undersigned shall fail to execute the contract and contract bond and return the same to the office of the engineer within fourteen (14) days after having been notified in writing to do so; otherwise to be returned.

The bidder declares that they understand that the estimate of quantities in the attached schedule is approximate only and that the attached quantities may be greater or less in accordance with the specifications.

The bidder agrees to perform the said work, for and in consideration of the payment of the amount becoming due on account of work performed, according to the unit prices bid in the following schedule, and to accept such amounts in full payment of said work.

The bidder declares that all of the said work will be performed at their own proper cost and expense, that they will furnish all necessary materials, labor, tools, machinery, apparatus, and other means of construction in the manner provided in the applicable specifications and the approved plans for the work together with all standard and special designs that may be designed on such plans, and the special provisions in the contract of which this proposal will become a part, if and when accepted. The bidder further agrees that the applicable specifications and all plans and working drawings are made a part hereof, as fully and completely as if attached hereto.

The bidder, if awarded the contract, agrees to begin the work not later than ten (10) days after the date of written notification from the engineer to do so, unless otherwise stipulated in the special provisions.

The bidder declares that if they are awarded the contract, they will execute the contract agreement and begin and complete the work within the time named herein, and they will file a good and sufficient surety bond for the amount of the contract for performance and also for the full amount of the contract for payment.

The bidder, if awarded the contract, shall pay all claims as required by Section 779.14, Statutes of Wisconsin, and shall be subject to and discharge all liabilities for injuries pursuant to Chapter 102 of the Statutes of Wisconsin, and all acts amendatory thereto. They shall further be responsible for any damages to property or injury to persons occurring through their own negligence or that of their employees or agents, incident to the performance of work under this contract, pursuant to the Standard Specifications for Road and Bridge Construction applicable to this contract.

In connection with the performance of work under this contract, the contractor agrees to comply with all applicable state and federal statutes relating to non-discrimination in employment. No otherwise qualified person shall be excluded from employment or otherwise be subject to discrimination in employment in any manner on the basis of age, race, religion, color, gender, national origin or ancestry, disability, arrest or conviction record (in keeping with s.111.32), sexual orientation, marital status, membership in the military reserve, honesty testing, genetic testing, and outside use of lawful products. This provision shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship. The contractor further agrees to ensure equal opportunity in employment to all applicants and employees and to take affirmative action to attain a representative workforce.

The contractor agrees to post notices and posters setting forth the provisions of the nondiscrimination clause, in a conspicuous and easily accessible place, available for employees and applicants for employment.

If a state public official (section 19.42, Stats.) or an organization in which a state public official holds at least a 10% interest is a party to this agreement, this contract is voidable by the state unless appropriate disclosure is made to the State of Wisconsin Ethics Board.

Effective with August 2015 Letting

BID PREPARATION

Preparing the Proposal Schedule of Items

A General

(1) Obtain bidding proposals as specified in section 102 of the standard specifications prior to 11:45 AM of the last business day preceding the letting. Submit bidding proposals using one of the following methods:

1. Electronic bid on the internet.
2. Electronic bid on a printout with accompanying diskette or CD ROM.
3. Paper bid under a waiver of the electronic submittal requirements.

(2) Bids submitted on a printout with accompanying diskette or CD ROM or paper bids submitted under a waiver of the electronic submittal requirements govern over bids submitted on the internet.

(3) The department will provide bidding information through the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

The contractor is responsible for reviewing this web site for general notices as well as information regarding proposals in each letting. The department will also post special notices of all addenda to each proposal through this web site no later than 4:00 P.M. local time on the Thursday before the letting. Check the department's web site after 5:00 P.M. local time on the Thursday before the letting to ensure all addenda have been accounted for before preparing the bid. When bidding using methods 1 and 2 above, check the Bid Express™ on-line bidding exchange at http://www.bidx.com/ after 5:00 P.M. local time on the Thursday before the letting to ensure that the latest schedule of items Expedite file (*.ebs or *.00x) is used to submit the final bid.

(4) Interested parties can subscribe to the Bid Express™ on-line bidding exchange by following the instructions provided at the www.bidx.com web site or by contacting:

Info Tech Inc.
5700 SW 34th Street, Suite 1235
Gainesville, FL 32608-5371
email: mailto:customer.support@bidx.com

(5) The department will address equipment and process failures, if the bidder can demonstrate that those failures were beyond their control.

(6) Contractors are responsible for checking on the issuance of addenda and for obtaining the addenda. Notice of issuance of addenda is posted on the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

or by calling the department at (608) 266-1631. Addenda can ONLY be obtained from the departments web site listed above or by picking up the addenda at the Bureau of Highway Construction, Room 601, 4802 Sheboygan Avenue, Madison, WI, during regular business hours.

(7) Addenda posted after 5:00 PM on the Thursday before the letting will be emailed to the eligible bidders for that proposal. All eligible bidders shall acknowledge receipt of the addenda whether they are bidding on the proposal or not. Not acknowledging receipt may jeopardize the awarding of the project.

B Submitting Electronic Bids

B.1 On the Internet

(1) Do the following before submitting the bid:

1. Have a properly executed annual bid bond on file with the department.
2. Have a digital ID on file with and enabled by Info Tech Inc. Using this digital ID will constitute the bidder's signature for proper execution of the bidding proposal.

(2) In lieu of preparing, delivering, and submitting the proposal as specified in 102.6 and 102.9 of the standard specifications, submit the proposal on the internet as follows:

1. Download the latest schedule of items reflecting all addenda from the Bid Express web site.
2. Use Expedite™ software to enter a unit price for every item in the schedule of items.
3. Submit the bid according to the requirements of Expedite™ software and the Bid Express™ web site. Do not submit a bid on a printout with accompanying diskette or CD ROM or a paper bid. If the bidder does submit a bid on a printout with accompanying diskette or a paper bid in addition to the internet submittal, the department will disregard the internet bid.
4. Submit the bid before the hour and date the Notice to Contractors designates.
5. Do not sign, notarize, and return the bidding proposal described in 102.2 of the standard specifications.

(3) The department will not consider the bid accepted until the hour and date the Notice to Contractors designates.

B.2 On a Printout with Accompanying Diskette or CD ROM

(1) Download the latest schedule of items from the Wisconsin pages of the Bid Express™ web site reflecting the latest addenda posted on the department's web site at:

http://wisconsindot.gov/Pages/doing-bus/contractors/hcci/bid-let.aspx

Use Expedite ™ software to prepare and print the schedule of items. Provide a valid amount for all price fields. Follow instructions and review the help screens provided on the Bid Express™ web site to assure that the schedule of items is prepared properly.

(2) Staple an 8 1/2 by 11 inch printout of the Expedite™ generated schedule of items to the other proposal documents submitted to the department as a part of the bidder's sealed bid. As a separate submittal not in the sealed bid envelop but due at the same time and place as the sealed bid, also provide the Expedite™ generated schedule of items on a 3 1/2 inch computer diskette or CD ROM. Label each diskette or CD ROM with the bidder's name, the 4 character department-assigned bidder identification code from the top of the bidding proposal, and a list of the proposal numbers included on that diskette or CD ROM as indicated in the following example:

Bidder

Name

BN00

Proposals: 1, 12, 14, & 22

(3) If bidding on more than one proposal in the letting, the bidder may include all proposals for that letting on one diskette or CD ROM. Include only submitted proposals with no incomplete or other files on the diskette or CD ROM.

(4) The bidder-submitted printout of the Expedite™ generated schedule of items is the governing contract document and must conform to the requirements of section 102 of the standard specifications. If a printout needs to be altered, cross out the printed information with ink or typewriter and enter the new information and initial it in ink. If there is a discrepancy between the printout and the diskette or CD ROM, the department will analyze the bid using the printout information.

(5) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The check code printed on the bottom of the printout of the Expedite™ generated schedule of items is not the same on each page.
2. The check code printed on the printout of the Expedite™ generated schedule of items is not the same as the check code for that proposal provided on the diskette or CD ROM.
3. The diskette or CD ROM is not submitted at the time and place the department designates.

C Waiver of Electronic Submittal

(1) The bidder may request a waiver of the electronic submittal requirements. Submit a written request for a waiver in lieu of bids submitted on the internet or on a printout with accompanying diskette or CD ROM. Use the waiver that was included with the paper bid document sent to the bidder or type up a waiver on the bidder's letterhead. The department will waive the electronic submittal requirements for a bidding entity (individual, partnership, joint venture, corporation, or limited liability company) for up to 4 individual proposals in a calendar year. The department may allow additional waivers for equipment malfunctions.

(2) Submit a schedule of items on paper conforming to section 102 of the standard specifications. The department charges the bidder a $75 administrative fee per proposal, payable at the time and place the department designates for receiving bids, to cover the costs of data entry. The department will accept a check or money order payable to: "Wisconsin, Dept. of Transportation."

(3) In addition to the reasons specified in section 102 of the standard specifications, proposals are irregular and the department may reject them for one or more of the following:

1. The bidder fails to provide the written request for waiver of the electronic submittal requirements.
2. The bidder fails to pay the $75 administrative fee before the time the department designates for the opening of bids unless the bidder requests on the waiver that they be billed for the $75.
3. The bidder exceeds 4 waivers of electronic submittal requirements within a calendar year.

(4) In addition to the reasons specified in section 102 of the standard specifications, the department may refuse to issue bidding proposals for future contracts to a bidding entity that owes the department administrative fees for a waiver of electronic submittal requirements.

PROPOSAL BID BOND

Wisconsin Department of Transportation

DT1303 1/2006

Proposal Number	Project Number	Letting Date
Name of Principal		
Name of Surety	State in Which Surety is Organized	

We, the above-named Principal and the above-named Surety, are held and firmly bound unto the State of Wisconsin in the sum equal to the Proposal Guaranty for the total bid submitted for the payment to be made; we jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns. The condition of this obligation is that the Principal has submitted a bid proposal to the State of Wisconsin acting through the Department of Transportation for the improvement designated by the Proposal Number and Letting Date indicated above.

If the Principal is awarded the contract and, within the time and manner required by law after the prescribed forms are presented for signature, enters into a written contract in accordance with the bid, and files the bond with the Department of Transportation to guarantee faithful performance and payment for labor and materials, as required by law, or if the Department of Transportation shall reject all bids for the work described, then this obligation shall be null and void; otherwise, it shall be and remain in full force and effect. In the event of failure of the Principal to enter into the contract or give the specified bond, the Principal shall pay to the Department of Transportation **within 10 business days of demand** a total equal to the Proposal Guaranty as liquidated damages; the liability of the Surety continues for the full amount of the obligation as stated until the obligation is paid in full.

The Surety, for value received, agrees that the obligations of it and its bond shall not be impaired or affected by any extension of time within which the Department of Transportation may accept the bid; and the Surety does waive notice of any such extension.

IN WITNESS, the Principal and Surety have agreed and have signed by their proper officers and have caused their corporate seals to be affixed this date: **(DATE MUST BE ENTERED)**

PRINCIPAL

(Company Name) **(Affix Corporate Seal)**

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Company Name)

(Signature and Title)

(Name of Surety) **(Affix Seal)**

(Signature of Attorney-in-Fact)

NOTARY FOR PRINCIPAL

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State of Wisconsin)

(Date Commission Expires)

Notary Seal

NOTARY FOR SURETY

(Date)

State of Wisconsin)
) ss.
_____ County)

On the above date, this instrument was acknowledged before me by the named person(s).

(Signature, Notary Public, State of Wisconsin)

(Print or Type Name, Notary Public, State of Wisconsin)

(Date Commission Expires)

Notary Seal

IMPORTANT: A certified copy of Power of Attorney of the signatory agent must be attached to the bid bond.

CERTIFICATE OF ANNUAL BID BOND

Wisconsin Department of Transportation

DT1305 8/2003

Time Period Valid (From/To)
Name of Surety
Name of Contractor
Certificate Holder Wisconsin Department of Transportation

This is to certify that an annual bid bond issued by the above-named Surety is currently on file with the Wisconsin Department of Transportation.

This certificate is issued as a matter of information and conveys no rights upon the certificate holder and does not amend, extend or alter the coverage of the annual bid bond.

Cancellation: Should the above policy be cancelled before the expiration date, the issuing surety will give thirty (30) days written notice to the certificate holder indicated above.

(Signature of Authorized Contractor Representative) (Date)

March 2010

LIST OF SUBCONTRACTORS

Section 66.0901(7), Wisconsin Statutes, provides that as a part of the proposal, the bidder also shall submit a list of the subcontractors the bidder proposes to contract with and the class of work to be performed by each. In order to qualify for inclusion in the bidder's list a subcontractor shall first submit a bid in writing, to the general contractor at least 48 hours prior to the time of the bid closing. The list may not be added to or altered without the written consent of the municipality. A proposal of a bidder is not invalid if any subcontractor and the class of work to be performed by the subcontractor has been omitted from a proposal; the omission shall be considered inadvertent or the bidder will perform the work personally.

No subcontract, whether listed herein or later proposed, may be entered into without the written consent of the Engineer as provided in Subsection 108.1 of the Standard Specifications.

Name of Subcontractor	Class of Work	Estimated Value

DECEMBER 2000

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

Instructions for Certification

1. By signing and submitting this proposal, the prospective contractor is providing the certification set out below.

2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective contractor shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective contractor to furnish a certification or an explanation shall disqualify such person from participation in this transaction.

3. The certification in this clause is a material representation of fact upon which reliance was placed when the department determined to enter into this transaction. If it is later determined that the contractor knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government the department may terminate this transaction for cause or default.

4. The prospective contractor shall provide immediate written notice to the department to whom this proposal is submitted if at any time the prospective contractor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department to which this proposal is being submitted for assistance in obtaining a copy of those regulations.

6. The prospective contractor agrees by submitting this proposal that, should this contract be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department entering into this transaction.

7. The prospective contractor further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," which is included as an addendum to PR-1273 - "Required Contract Provisions Federal Aid Construction Contracts," without

modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. The contractor may rely upon a certification of a prospective subcontractor/materials supplier that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A contractor may decide the method and frequency by which it determines the eligibility of its principals. Each contractor may, but is not required to, check the Disapproval List (telephone # 608/266/1631).

9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a contractor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

(1) The prospective contractor certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offense enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective contractor is unable to certify to any of the statements in this certification, such prospective contractor shall attach an explanation to this proposal.

Special Provisions

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SPECIAL PROVISIONS

1. General.

Perform the work under this construction contract for Project 7575-08-72, Cass Street, City of La Crosse, 4th Street to 7th Street, STH 16; Project 7575-08-73, Cass Street, City of La Crosse, 4th Street to 7th Street, Water and Sanitary, STH 16, La Crosse County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2016 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.
100-005 (20151210)

2. Scope of Work.

The work under this contract shall consist of concrete pavement, HMA pavement, curb and gutter, sidewalk, storm sewer, water main, sanitary sewer, base aggregate dense, traffic signals, street lighting, pavement marking, signing, and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.
104-005 (20090901)

3. Prosecution and Progress.

Begin work within ten calendar days after the engineer issues a written notice to do so.

Provide the time frame for construction of the project within the 2017 construction season to the engineer in writing within a month after executing the contract but at least 14 calendar days before the preconstruction conference. Assure that the time frame is consistent with the contract completion time. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved time frame.

To revise the time frame, submit a written request to the engineer at least two weeks before the beginning of the intended time frame. The engineer will approve or deny that request based on the conditions cited in the request and its effect on the department's scheduled resources.

Do not store equipment, vehicles, or materials on adjacent streets beyond the project limits without the approval of the engineer.

Do not store equipment, vehicles, or materials within the temporary limited easement or private parking lots of any business parking or driving area without the written approval of the engineer.

Pedestrian access shall be provided throughout construction. Perform work in stages so the existing sidewalk on at least one side of each roadway remains in place and open to pedestrians as long as practically possible to accommodate pedestrian access. After any existing sidewalk has been removed and before the new sidewalk has been constructed, provide temporary sidewalk surface and sidewalk connections, as necessary and as shown in the plan, that provide access to the properties and businesses located within the construction limits.

There are several businesses along STH 16 that have building entrances directly onto STH 16 or a side street within the limits of the project. In order to minimize disruptions to the businesses and to provide pedestrian access to these buildings during construction, leave the existing sidewalks immediately adjacent to the entrances in place as long as practical. Replace the sidewalk panels immediately in front of the building entrances and open to pedestrian traffic within 12 hours of the sidewalk panel's removal with the use of HES concrete. Notify the building owner two business days in advance of replacing the sidewalk in front of their building entrance.

Provide a temporary pedestrian crossing, constructed with temporary sidewalk surface plywood and temporary curb ramps, across STH 16 at either 5th Avenue or 6th Street (south leg) to allow pedestrians to cross the construction zone. At least one of these temporary pedestrian crossings, either at 5th Avenue or at 6th Street (south leg), shall remain open to north-south pedestrian traffic at all times during construction.

Provide temporary crosswalks across each side street located just beyond the road closure/construction limits as shown in the plans.

Removal of portions of the existing sidewalk and temporary sidewalk surfaces may be necessary to allow utility service connections. Temporary closure of the sidewalk in the immediate vicinity of the utility work will be permitted during daytime hours. Provide appropriate signing at the nearest STH 16 crossing on both sides of the closure, notifying pedestrians of the closure. The removed sidewalk shall be replaced with temporary sidewalk surface plywood and opened to pedestrians prior to night time hours.

Install temporary pedestrian safety fence adjacent to sidewalks open to pedestrians prior to beginning excavation. The fence shall only be removed when the sidewalk is closed for construction related purposes and the fence shall be reinstalled prior to the reopening of the sidewalk.

Remove the existing street lights in stages so lighting is maintained on one side of STH 16 (Cass Street and 7th Street) during construction at all times.

The existing concrete parking lot serving the Mileage Gas Station at Station 108+35 to 109+90 Left shall remain in place as long as practically possible in order to allow vehicles access to the gas pumps on both sides of the pump island.

The Bimbo Bakeries business entrance at Station 100+63.5 Left and the alley at Station 100+61.5 Right shall remain open at all times during construction and accessible from 4th Street for deliveries and shipments except for the following times:

- From noon Fridays to 11:00 AM Mondays, prior to June 1.
- From noon Fridays to 7:00 AM Mondays, after June 1.

The closure of the entrance and the alley shall occur no more than a total of 3 weekends and only during the times listed above. The entrance and the alley can be opened under gravel conditions on a temporary basis. The temporary gravel surface areas shall be maintained to provide a smooth riding surface until the areas are paved. The alley's construction shall coincide with the entrance because the alley is used by the delivery trucks to maneuver into the bakery's entrance and loading dock.

Maintain vehicle access to residential properties at all times except when replacing the driveways. Once the driveways have been removed new concrete driveways and sidewalks shall be reopened within five days.

Notify residents two business days in advance of closing their driveway entrances.

Replace standard spec 108.10.2.2(1) with the following:

(1) The engineer will award a time extension for severe weather on calendar day and completion date contracts. Submit a request for severe weather days if the number of adverse weather days, as defined in standard spec 101.3, exceeds the anticipated number of adverse weather days tabulated below.

Total Anticipated Adverse Weather Days for Each Calendar Month[2]

Jan[1]	31	Aug	3
Feb[1]	28	Sept	4
Mar[1]	31	Oct	5
April	5	Nov 1 through 15	2
May	4	Nov 16 through 30[1]	15
June	4	Dec[1]	31
July	3		

[1] Includes an anticipated winter suspension from November 16 through March 31.

[2] The number of days will be modified in the special provision for year-round and painting contracts.

Add the following to standard spec 108.11:

Once the STH 16/5th Avenue intersection is closed to north-south through traffic, if the contractor fails to complete the necessary contract work along STH 16 between Stations 100+22.39 and 103+25 and along 5th Avenue between Stations 13+10 and 16+00 and open

the STH 16/5th Avenue intersection to through traffic as shown in the plans within 40 calendar days or prior to 12:01 AM June 16, 2017, whichever is sooner, the department will assess the contractor $3,000.00 in interim liquidated damages for each calendar day that the intersection is closed to through traffic after the 40th calendar day that the intersection was first closed or after 12:01 AM June 16, 2017, whichever is sooner. An entire calendar day will be charged for any period of time within a calendar day that the intersection remains closed beyond 12:01 AM of the 41st day or 12:01 AM June 16, 2017, whichever is sooner.

If contract time expires prior to completing all work specified in the contract, additional liquidated damages will be affixed according to standard spec 108.11.

The concrete pavement, curb and gutter, sidewalk and all layers of HMA pavement, including the final top layer, on Cass Street between Stations 100+22.39 and 103+25 and on 5th Avenue shall be constructed prior to opening the intersection to traffic.

4. Traffic.

When the STH 16/5th Avenue intersection is closed to traffic close STH 16 to through traffic from 4th Street to 7th Street, as shown in the plans, during construction operations under this contract. Sign and maintain the detour route to follow 4th Street to La Crosse Street and back to STH 16 at 7th Street according to the plans.

When the STH 16/5th Avenue intersection is open to traffic close STH 16 to through traffic from Station 103+25 to 7th Street, as shown in the plans, during construction operations under this contract. Sign and maintain the detour route to follow 4th Street to La Crosse Street and back to STH 16 at 7th Street according to the plans.

The STH 16/5th Avenue intersection shall remain closed to north-south through traffic along 5th Avenue as short of a time frame as possible. The STH 16/5th Avenue intersection from Station 100+22.39 to Station 103+25 shall be completed and open to traffic within 40 calendar days of first being closed or prior to June 16, 2017, whichever is sooner. Once the STH 16/5th Avenue intersection is closed to north-south through traffic complete all work along STH 16 from Station 100+22.39 to Station 103+25 and along 5th Avenue from Station 13+10 to Station 16+00, including the finished pavement, and re-open the intersection to north-south through traffic within 40 calendar days or prior to June 16, 2017, whichever is sooner.

The side streets of 6th Street (south and north legs), 7th Street (south leg), and Cass Street (east of 7th Street) shall be closed to through traffic according to the plans during construction operations under this contract.

Wisconsin Lane Closure System Advance Notification
Provide the following advance notification to the engineer for incorporation into the Wisconsin Lane Closure System (LCS).

TABLE 108-1 CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction < 16')	MINIMUM NOTIFICATION
Lane and shoulder closures	7 calendar days
Full roadway closures	7 calendar days
Ramp closures	7 calendar days
Full ramp closures	7 calendar days
Detours	7 calendar days
Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	MINIMUM NOTIFICATION
Lane and shoulder closures	3 business days
System and service ramp closures	3 business days
Modifying all closure types	3 business days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.
108-057 (20160607)

5. Holiday Work Restrictions.

Do not perform work on, nor haul materials of any kind along or across any portion of the highway carrying STH 16 traffic, and entirely clear the traveled way and shoulders of such portions of the highway of equipment, barricades, signs, lights, and any other material that might impede the free flow of traffic during the following holiday periods:

- From noon Friday, May 26, 2017 to 6:00 AM Tuesday, May 30, 2017 for Memorial Day;
- From noon Friday, June 30, 2017 to 6:00 AM Wednesday, July 5, 2017 for Independence Day;
- From noon Friday, September 1, 2017 to 6:00 AM Tuesday, September 5, 2017 for Labor Day.

107-005 (20050502)

6. Utilities.

This contract does not come under the provisions of Wisconsin Administrative Code Chapter Trans 220.

Some of the work described below is dependent on prior work being performed by the contractor at a specific site. In such situations, provide a good faith notice to both the engineer and the affected utility when the utility is to start work at the site. Provide this

notice 14 to 16 calendar days in advance of when you anticipate the prior work being completed and the site will be available to the utility. Follow-up with and provide a confirmation notice to the engineer and the utility not less than 3 working days before the site will be ready for the utility to begin its work.

Additional detailed information regarding the location of vacated, relocated, and/or removed utility facilities is available in the work plan provided by each utility company or on the permits issued to them. View these documents at the region WisDOT office during normal working hours.

Project #7575-08-72

CenturyLink has underground fiber optic and copper cable facilities within the project limits and are located within a multiple conduit system.

CenturyLink does not anticipate any conflict with their underground fiber optic facilities.

CenturyLink also has overhead fiber optic and copper facilities attached to Xcel Energy owned power poles within the project limits.

CenturyLink plans to remove their overhead facility at approximately Station 44'SSN'+00 and the service lines to the nearby businesses when the 301 7th Street S and 710 Cass Street buildings are demolished prior to construction operations under this contract.

Charter Communications has an underground fiber optic facility crossing STH 16 in a north south direction at approximately 104+76.

Charter does not anticipate any conflict with their underground fiber optic facility.

Xcel Energy - Electric has underground and overhead facilities within the project limits. Most of the underground electric facilities are located within concrete-encased multiple conduit systems and connected to underground utility vaults.

Xcel does not anticipate conflict with their underground conduit system crossing STH 16 in a north south direction at approximate Station 100+56. The depth from the pavement surface to the top of the concrete duct system is approximately 5' and to the bottom of the duct system the depth is estimated at 8' from the surface.

Notify Xcel Energy at least 5 days before roadway excavation and storm sewer operations begin near the underground facility at Station 100+56. Xcel will have an inspector on site when excavation and new storm sewer installation work is being completed near this facility.

Xcel Energy will adjust their manhole covers to match the final pavement grade during construction.

Xcel estimates the depth of their underground electric facility crossing STH 16 in a north south direction at approximate Station 104+70 at 30" or greater. After the pavement has

been removed Xcel plans to relocate this facility and install a new 6" conduit for future use concurrently with the construction operations under this contract. The estimated time it will take to relocate the buried electric line is 5 working days. Xcel requires a minimum 10 working day notice for this relocation.

Xcel does not anticipate conflict with their overhead electric lines and power poles located along the east side of the alley at approximately Station 104+81 right side of STH 16.

After the pavement has been removed Xcel plans to remove their two electric utility vaults located at stations 108+50 and 109+85 and backfill the area with granular material. Xcel also plans to discontinue the concrete encased conduit system between these two vaults and also discontinue the concrete encased conduit system running north out of the vault at Station 109+85. The conduit system running north will be cut and capped at the north alley entrance near Station 110+00 LT. Xcel requires a minimum 10 working day notice for this work.

Xcel plans to leave the overhead electric facility crossing STH 16 near Station 56'CSE'+81 in place.

Xcel plans to remove the overhead electric facility between Stations 43'SSN'+05 and 44'SSN'+13, including their service lines to the adjacent buildings, prior to construction when the buildings are demolished.

Xcel Energy estimates that it will take 15 to 20 working days to relocate all of their facilities.

Xcel Energy – Gas has underground facilities within the project limits.

Xcel Energy will relocate the underground gas main running along the north side of Cass Street to avoid traffic signal bases SB1 and SB2 after the existing pavement, curb and gutter and sidewalks have been removed. Xcel Energy estimates it will take 30 working days to relocate the buried gas in the northwest corner of 5th Avenue to avoid SB1. Xcel requires a minimum 30 working day notice for this relocation in order to coordinate gas shutdowns and interruptions to the Bimbo Bakery. Xcel Energy estimates it will take 10 working days to relocate the buried gas in the northeast corner of 5th Avenue to avoid SB2. Xcel requires a minimum 15 working day notice for this relocation.

Xcel Energy will relocate the underground gas main running along the north side of Cass Street to avoid street light base SL100 after the existing pavement, curb and gutter and sidewalks have been removed. Xcel Energy estimates it will take 10 working days to relocate the buried gas to avoid SL100. Xcel requires a minimum 15 working day notice for this relocation.

Xcel Energy plans to discontinue the gas main running north south under Cass Street at Station 104+60 and cap the main under the north terrace behind the curb after the existing pavement, curb and gutter and sidewalk have been removed. Xcel plans to complete this work at the same time when the relocation work is completed to avoid SL100.

Prior to construction operations under this Contract, Xcel Energy plans to relocate their gas main from Station 106+75 to Station 109+25 that is in conflict with the new storm sewer pipe running under STH 16. The gas will be relocated to the south, outside of the construction limits. The existing gas main between Stations 106+75 and 109+25 will then be discontinued. All gas services will be renewed in this area.

Xcel Energy plans to discontinue the gas main running under Cass Street between Station 110'ALE'+00 and 55'CSE'+00 by cutting and capping the gas main at these station limits after the existing pavement has been removed. The discontinued pipe will be left in place. Xcel also plans to discontinue the gas main running under 7th Street S (north leg) from the main under Cass to Street to the north project limits on 7th Street. Xcel Energy will then install a new connecting gas main on the south side of King Street to the existing gas main on the east side of 7th Street (north leg). Xcel requires a minimum 15 working day notice for this work.

Xcel Energy – Steam has discontinued underground steam pipes within the project limits.

The removal of the discontinued steam pipes and insulation that are in conflict with the storm sewer and water main pipes will be completed by Xcel Energy.

If the steam pipe insulation is determined to be asbestos containing material and requires abatement or removal, at least a 10 business day notification is required before the abatement or removal operations can begin by Xcel. No roadway construction operations shall occur in the area of the encountered pipe during this 10 day notification period and when the abatement or removal work by Xcel Energy is occurring.

City of La Crosse (Sanitary Sewer) has underground sanitary sewer facilities that will be adjusted according to the plans and additional articles in the project special provisions. This work will be done as part of the tied project contract 7575-08-73.

City of La Crosse (Water) has underground water facilities that will be adjusted according to the plans and additional articles in the project special provisions. This work will be done as part of the tied project contract 7575-08-73.

Project #7575-08-73

All utilities located on or near this project are being coordinated under project 7575-08-72. There are no other conflicts with utilities for the project.

7. Municipality Acceptance of Sanitary Sewer and Water Main Construction.

Both the department and City of La Crosse personnel will inspect construction of sanitary sewer and water main under this contract. However, construction staking, testing, and acceptance of the sanitary sewer and water main construction will be by the City of La Crosse.

105-001 (20140630)

8. General Requirements for Water Main and Sanitary Sewer.

The water main and sanitary sewer work under this contract shall be performed according to the requirements of these special provisions and the "City of La Crosse Standard Specifications for the Construction of Sewer". A copy of these city specifications is available on the city's website and can be downloaded using the following link:

http://www.cityoflacrosse.org/DocumentCenter/Home/View/187

9. Referenced Construction Specifications.

Construct the water main and sanitary sewer work conforming to the "City of La Crosse Standard Specifications for the Construction of Sewer." If there is a discrepancy or conflict between the referenced specification and the standard specifications regarding contract administration, part 1 of the standard specifications governs.

10. Notice to Contractor – Potential Asbestos in Steam Pipe Insulation.

Existing utility facility maps indicate that underground abandoned steam pipes are present at the following approximate locations:

- A 2-inch pipe enters the project from the west under the eastbound lanes and then runs south at Station 101+50.
- A 3-inch pipe crosses Cass Street at Station 100+62 in a north-south direction and runs under the entrance to the north and under the alley to the south.
- A 3-inch pipe crosses Cass Street at Station 104+74 in a north-south direction and runs under the north and south alleys.
- A 3-inch pipe enters the project from the south at Station 108+40 and then runs easterly under the eastbound lanes to Station 109+95 and then heads north under the alley.

If the pipes listed above are insulated the insulation should be treated as asbestos containing material. Do not disturb the insulation or any asbestos containing material. Should the insulation or asbestos containing material be disturbed, stop work immediately, notify the engineer, and the engineer will notify the department's Bureau of Technical Services at (608) 266-1476 for an emergency response according to standard spec 107.24. Keep material wet until it is abated or until it is determined to be non-asbestos containing material. Abatement will be completed by Xcel Energy.

If sections of the pipes listed above need to be removed for installations of new underground utilities such as storm sewer or water main, the removal of the abandoned steam pipes and insulation will be completed by Excel Energy.

If the pipe insulation is determined to be asbestos containing material and requires abatement or removal, at least a 10 working day notification is required before the abatement or removal operations can begin by Xcel. No roadway construction operations shall occur in the area of the encountered pipe during this 10 day notification period and when the abatement or removal work by Excel Energy is occurring.

11. Notice to Contractor – Potential Heated Sidewalk.

The existing private sidewalk leading to the commercial building located at 720 Cass Street (Station 55'CSE'+85 RT) may have electric heating coils running underneath the sidewalk. Remove and replace the sidewalk to the limits shown in the plans with extra care so as not to damage the coils. If field verification determines the coils will need to be buried deeper or replaced due to conflict with the new sidewalk grade, then contact the engineer and the property owner at least 3 weeks prior to placing the new sidewalk. The property owner will replace the coils as necessary.

12. Health and Safety Requirements for Workers Remediating Petroleum Contamination.

Add the following to standard spec 107.1(2):

Soil contamination with gasoline, diesel fuel, fuel oil, or other petroleum related products may be encountered during excavation activities. Prepare a site specific Health and Safety Plan complying with the Occupational Safety and Health Administration (OSHA) standard for Hazardous Waste Operation and Emergency Response (HAZWOPER), 29 CFR 1910.120.

All site workers taking part in remediation activities or who will have the reasonable probability of exposure of safety or health hazards associated with the hazardous material shall have completed Health and Safety training that meets OSHA requirements. Prior to the start of remediation work, submit to the engineer a site specific Health and Safety Plan, and written verification that workers will have completed up-to-date OSHA training.

Develop, delineate, and enforce the health and safety exclusions zones for each contaminated site location pursuant to 29 CFR 1910.120.
107-115 (20150630)

13. Removing Metal Pipe Casings, Item 204.9060.S.01.

A Description
This special provision describes removing existing vertical metal pipe casings according to the pertinent provisions of standard spec 204 and as hereinafter provided.

B (Vacant)

C Construction
Remove the metal pipe casings and caps as outlined in standard spec 204.3.3.

D Measurement
The department will measure Removing Metal Pipe Casings by the individual well casing and cap, acceptably removed.

E Payment
Add the following to standard spec 204.5:

ITEM NUMBER	DESCRIPTION	UNIT
204.9060.S.01	Removing Metal Pipe Casings	Each

Payment is full compensation for cutting off the existing pipe casing, removing and properly disposing of the cut off portion and cap and backfilling.
204-025 (20150630)

14. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil, Item 205.0501.S.

A Description
A.1 General
This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil. Petroleum contaminated soil shall be disposed of at a Wisconsin Department of Natural Resources (WDNR)-approved bioremediation facility. The closest bioremediation facilities are:

La Crosse County
6500 State Rd 16
La Crosse, Wisconsin 54601
(608) 785-9572

Advanced Disposal – Seven Mile Creek Landfill
8001 Olson Drive
Eau Claire, Wisconsin 54703
(715) 830-0284

Perform this work according to standard spec 205 and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport petroleum- and lead-contaminated soil.

A.2 Notice to the Contractor – Contaminated Soil Location(s)
The department completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following locations:

- Cass Street Pharmacy (528 Cass Street): Station 105+50 to 106+25, from reference line to the construction limits on the right.
- Mileage (601 Cass Street): Station 108+25 to 109+00, from reference line to the construction limits on the left.

No underground storage tanks (USTs) were encountered during the testing; however, historical information indicates USTs may exist at the following locations:

- Cass Street Pharmacy (528 Cass Street): Station 105+50 to 106+50, from reference line to limits of construction right.

Assist the environmental consultant in determining if USTs are present at these locations, by performing backhoe pit investigations as directed by the environmental consultant. The backhoe pit investigation should be performed as soon as practical after sidewalks, curb and gutter, and pavement are removed and prior to utility construction beginning in those areas. The backhoe pit investigation shall be limited to areas of potential USTs and is incidental to construction. The backhoe pit investigations shall include up to 3 test pits per location, to a maximum depth of 6 feet below ground surface (bgs). The test pit investigations shall be incidental to this pay item.

Contaminated soils and USTs may be encountered at other locations within the construction limits. If contaminated soils and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Contaminated soil at other locations shall be managed by the contractor under this contract as specified herein. USTs will be removed by others.

For further information regarding previous investigation at these sites contact:

Name:	Steve Vetsch
	Wisconsin DOT, Southwest Region
Address:	3550 Mormon Coulee Road
	La Crosse, WI 54601
Phone:	(608) 785-9049
Fax:	(608) 789-6306
e-mail:	Stephan.Vetsch@dot.wi.gov

A.3 Coordination

Coordinate work under this contract with the environment consultant:

Consultant:	TRC Environmental Corporation
Address:	708 Heartland Trail, Suite 3000, Madison, WI 53717
Fax:	(608) 826-3941
Contact:	Dan Haak
Phone:	(608) 826-3628 (office), (608) 886-7423 (mobile)
e-mail:	DHaak@trcsolutions.com
Contact:	Ted O'Connell
Phone:	(608) 826-3648 (office), (608) 630-6710 (mobile)
e-mail:	TOConnell@trcsolutions.com

The role of the environmental consultant will be limited to:

1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;

2. Identifying petroleum-contaminated soils to be hauled to the bioremediation facility;

3. Documenting that activities associated with management of petroleum- contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein;

4. Obtaining the necessary approvals for disposal of petroleum-contaminated soil from the bioremediation facility,

5. Characterizing and obtaining necessary approvals for disposal of contaminated material not previously identified during testing.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also, notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Identify the WDNR-approved bioremediation facility that will be used for disposal of petroleum-contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the off-site disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Jennifer Fredrickson with the department at (608) 785-9945.

A.5 Health and Safety Requirements for Workers Remediating Contamination
Add the following to standard spec 107.1:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, or other petroleum related products. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

Disposal of petroleum-contaminated soil at the bioremediation facility is subject to the facility's safety policies.

B (Vacant)

C Construction
Add the following to standard spec 205.3:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated. Contaminated soils are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations to ensure that they do not extend beyond the minimum required to construct utilities and highway improvements unless expressly directed to do so by the engineer.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite disposal. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

On the basis of the results of such field-screening, the material will be managed as follows:

- Excavation Common: Consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level Petroleum-contaminated Material: PID readings less than 10 ppm and no observation of staining or petroleum odor for reuse as fill within the construction limits, or

- Petroleum-contaminated Soil: Significant petroleum odor, staining, and/or PID readings greater than 10 ppm for off-site treatment and disposal at the WDNR-licensed bioremediation facility, or
- Potentially Contaminated: Contaminated material from areas other than listed above for temporary stockpiling and additional characterization prior to disposal.

If contaminated soils and/or USTs are encountered outside the limits of known contamination on the project, terminate excavation activities in the area and notify the engineer. Environmental consultant will screen the potentially-contaminated material and some material may require additional characterization prior to disposal. Provide for the temporary stockpiling of up to 100 cubic yards of potentially-contaminated soil on-site for additional characterization. Construct and maintain a temporary stockpile of the material according to NR 718.05(3), including, but not limited to, placement of the contaminated soil/fill material on an impervious surface and covering the stockpile with impervious material to prevent infiltration of precipitation. The department's environmental consultant will collect representative samples of the stockpiled material, laboratory-analyze the samples, and advise the contractor, within 10 business days of the construction of the stockpile, of disposal requirements. The stockpiled material shall be disposed either at the WDNR-licensed disposal facility by the contractor or, if characterized as hazardous waste, by the department. As an alternative to temporarily stockpiling contaminated soil/fill material that requires additional characterization, the contractor has the option of suspending excavation in those areas where such soil is encountered until such time as characterization is completed.

Directly load and haul soils designated by the environmental consultant for offsite disposal to the WDNR approved bioremediation facility. Verify that vehicles used to transport contaminated material are licensed for such activity according to applicable state and federal regulations. Use loading and hauling practices that are appropriate to prevent any spills or releases of contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation and/or disposal so as not to contain free liquids.

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility. Load tickets must be delivered to the engineer within 10 business days of the date on which the soil was accepted by the bioremediation facility.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	Ton

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; tipping fees including any applicable taxes and surcharges; obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation including test pits; dewatering of soils prior to transport, if necessary.
205-003 (20150630)

15. QMP Base Aggregate.

A Description

A.1 General

(1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.

(2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.

(3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.

(4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
1. Production and placement control and inspection.
2. Material sampling and testing.

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

A.2 Contractor Testing for Small Quantities

(1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.

(2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:

1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.
2. Divide the aggregate into uniformly sized sublots for testing as follows:

Plan Quantity	Minimum Required Testing
≤ 1500 tons	One test from production, load-out, or placement at the contractor's option[1]
> 1500 tons and ≤ 6000 tons	Two tests of the same type, either from production, load-out, or placement at the contractor's option[1]
> 6000 tons and ≤ 9000 tons	Three placement tests[2] [3]

[1] If using production tests for acceptance, submit test results to the engineer for review prior to incorporating the material into the work. Production test results are valid for a period of 3 years.

[2] For 3-inch material, obtain samples at load-out.

[3] If the actual quantity overruns 9000 tons, create overrun sublots to test at a rate of one additional placement test for each 3000 tons, or fraction of 3000 tons, of overrun.

3. No control charts are required. Submit aggregate load-out and placement test results to the engineer within one business day of obtaining the sample. Assure that all properties are within the limits specified for each test.
4. Department verification testing is optional for quantities of 6000 tons or less.

(3) Material represented by a sublot with any property outside the specification limits is nonconforming. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

B Materials

B.1 Quality Control Plan

(1) Submit a comprehensive written quality control plan to the engineer at or before the pre-construction meeting. Do not place base before the engineer reviews and comments on the plan. Construct the project as that plan provides.

(2) Do not change the quality control plan without the engineer's review. Update the plan with changes as they become effective. Provide a current copy of the plan to the engineer and post in each of the contractor's laboratories as changes are adopted. Ensure that the plan provides the following elements:

1. An organizational chart with names, telephone numbers, current certifications and/or titles, and roles and responsibilities of QC personnel.
2. The process used to disseminate QC information and corrective action efforts to the appropriate persons. Include a list of recipients, the communication means that will be used, and action time frames.
3. A list of source and processing locations, section and quarter descriptions, for all aggregate materials requiring QC testing.

4. Test results for wear, sodium sulfate soundness, freeze/thaw soundness, and plasticity index of all aggregates requiring QC testing. Obtain this information from the region materials unit or from the engineer.
5. Descriptions of stockpiling and hauling methods.
6. Locations of the QC laboratory, retained sample storage, and where control charts and other documentation is posted.
7. An outline for resolving a process control problem. Include responsible personnel, required documentation, and appropriate communication steps.

B.2 Personnel

(1) Have personnel certified under the department's highway technician certification program (HTCP) perform sampling, testing, and documentation as follows:

Required Certification Level:	Sampling or Testing Roles:
Aggregate Technician IPP Aggregate Sampling Technician Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Sampling[1]
Aggregate Technician IPP Aggregate Assistant Certified Technician (ACT-AGG)	Aggregate Gradation Testing, Aggregate Fractured Particle Testing, Aggregate Liquid Limit and Plasticity Index Testing

[1] Plant personnel under the direct observation of an aggregate technician certified at level one or higher may operate equipment to obtain samples.

(2) A certified technician must coordinate and take responsibility for the work an ACT performs. Have a certified technician ensure that all sampling and testing is performed correctly, analyze test results, and post resulting data. No more than one ACT can work under a single certified technician.

B.3 Laboratory

(1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm

B.4 Quality Control Documentation

B.4.1 General

(1) Submit base aggregate placement documentation to the engineer within 10 business days after completing base placement. Ensure that the submittal is complete, neatly organized, and includes applicable project records and control charts.

B.4.2 Records

(1) Document all placement observations, inspection records, and control adjustments daily in a permanent field record. Also include all test results in the project records. Provide test results to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute tabulated results using a method mutually agreeable to the engineer and contractor.

B.4.3 Control Charts

(1) Plot gradation and fracture on the appropriate control chart as soon as test results are available. Format control charts according to CMM 8.30. Include the project number on base placement control charts. Maintain separate control charts for each base aggregate size, source or classification, and type.

(2) Provide control charts to the engineer within 6 hours after obtaining a sample. For 3-inch base, extend this 6-hour limit to 24 hours. Post or distribute charts using a method mutually agreeable to the engineer and contractor. Update control charts daily to include the following:

1. Contractor individual QC tests.
2. Department QV tests.
3. Department IA tests.
4. Four-point running average of the QC tests.

(3) Except as specified under B.8.2.1 for nonconforming QV tests, include only QC tests in the running average. The contractor may plot process control or informational tests on control charts, but do not include these tests, conforming QV tests, or IA tests in the running average.

B.5 Contractor Testing

(1) Test gradation, fracture, liquid limit and plasticity index during placement for each base aggregate size, source or classification, and type.

(2) Test gradation once per 3000 tons of material placed. Determine random sample locations and provide those sample locations to the engineer. Obtain samples after the material has been bladed, mixed, and shaped but before compacting; except collect 3-inch samples from the stockpile at load-out. Do not sample from material used to maintain local traffic or from areas of temporary base that will not have an overlying pavement. On days when placing only material used to maintain local traffic or only temporary base that will not have an overlying pavement, no placement testing is required.

(3) Split each contractor QC sample and identify it according to CMM 8.30. Retain the split for 7 calendar days in a dry, protected location. If requested for department comparison testing, deliver the split to the engineer within one business day.

(4) The engineer may require additional sampling and testing to evaluate suspect material or the technician’s sampling and testing procedures.

(5) Test fracture for each gradation test until the fracture running average is above the lower warning limit. Subsequently, the contractor may reduce the frequency to one test per 10 gradation tests if the fracture running average remains above the warning limit.

(6) Test the liquid limit and plasticity index for the first gradation test. Subsequently, test the liquid limit and plasticity index a minimum of once per 10 gradation tests.

B.6 Test Methods

B.6.1 Gradation

(1) Test gradation using a washed analysis conforming to the following as modified in CMM 8.60:

Gradation..... AASHTO T 27
Material finer than the No. 200 sieve..... AASHTO T 11

(2) For 3-inch base, if 3 consecutive running average points for the percent passing the No. 200 sieve are 8.5 percent or less, the contractor may use an unwashed analysis. Wash at least one sample out of 10. If a single running average for the percent passing the No. 200 sieve exceeds 8.5 percent, resume washed analyses until 3 consecutive running average points are again 8.5 percent passing or less.

(3) Maintain a separate control chart for each sieve size specified in standard spec 305 or standard spec 310 for each base aggregate size, source or classification, and type. Set control and warning limits based on the standard specification gradation limits as follows:

1. Control limits are at the upper and lower specification limits.
2. There are no upper warning limits for sieves allowing 100 percent passing and no lower control limits for sieves allowing 0 percent passing.
3. Dense graded warning limits, except for the No. 200 sieve, are 2 percent within the upper and lower control limits. Warning limits for the No. 200 sieve are set 0.5 percent within the upper and lower control limits.
4. Open graded warning limits for the 1-inch, 3/8-inch, and No. 4 sieves are 2 percent within the upper and lower control limits. Upper warning limits for the No. 10, No. 40, and No. 200 sieves are 1 percent inside the upper control limit.

B.6.2 Fracture

(1) Test fracture conforming to CMM 8.60. The engineer will waive fractured particle testing on quarried stone.

(2) Maintain a separate fracture control chart for each base aggregate size, source or classification, and type. Set the lower control limit at the contract specification limit, either specified in another special provision or in table 301-2 of standard spec 301.2.4.5. Set the lower warning limit 2 percent above the lower control limit. There are no upper limits.

B.6.3 Liquid Limit and Plasticity

(1) Test the liquid limit and plasticity according to AASHTO T 89 and T 90.

(2) Ensure the material conforms to the limits specified in standard spec table 301-2.

B.7 Corrective Action

B.7.1 General

(1) Consider corrective action when the running average trends toward a warning limit. Take corrective action if an individual test exceeds the contract specification limit. Document all corrective actions both in the project records and on the appropriate control chart.

B.7.2 Placement Corrective Action

(1) Do not blend additional material on the roadbed to correct gradation problems.

(2) Notify the engineer whenever the running average exceeds a warning limit. When 2 consecutive running averages exceed a warning limit, the engineer and contractor will discuss appropriate corrective action. Perform the engineer's recommended corrective action and increase the testing frequency as follows:

1. For gradation, increase the QC testing frequency to at least one randomly sampled test per 1000 tons placed.
2. For fracture, increase the QC testing frequency to at least one test per gradation test.

(3) If corrective action improves the property in question such that the running average after 4 additional tests is within the warning limits, the contractor may return to the testing frequency specified in B.5.3. If corrective action does not improve the property in question such that the running average after 4 additional individual tests is still in the warning band, repeat the steps outlined above starting with engineer notification.

(4) If the running average exceeds a control limit, material starting from the first running average exceeding the control limit and ending at the first subsequent running average inside the control limit is nonconforming and subject to pay reduction.

(5) For individual test results significantly outside the control limits, notify the engineer, stop placing base, and suspend other activities that may affect the area in question. The engineer and contractor will jointly review data, data reduction, and data analysis; evaluate sampling and testing procedures; and perform additional testing as required to determine the extent of potentially unacceptable material. The engineer may direct the contractor to remove and replace that material. Individual test results are significantly outside the control limits if meeting one or more of the following criteria:

1. A gradation control limit for the No. 200 sieve is exceeded by more than 3.0 percent.
2. A gradation control limit for any sieve, except the No. 200, is exceeded by more than 5.0 percent.
3. The fracture control limit is exceeded by more than 10.0 percent.

B.8 Department Testing

B.8.1 General

(1) The department will conduct verification testing to validate the quality of the product and independent assurance testing to evaluate the sampling and testing. The department will provide the contractor with a listing of names and telephone numbers of all QV and IA personnel for the project, and provide test results to the contractor within 2 business days after the department obtains the sample.

B.8.2 Verification Testing

B.8.2.1 General

(1) The department will have an HTCP technician, or ACT working under a certified technician, perform QV sampling and testing. Department verification testing personnel must meet the same certification level requirements specified in B.2 for contractor testing personnel for each test result being verified. The department will notify the contractor before sampling so the contractor can observe QV sampling.

(2) The department will conduct QV tests of each base aggregate size, source or classification, and type during placement conforming to the following:

1. One non-random test on the first day of placement.
2. At least one random test per 30,000 tons, or fraction of 30,000 tons, placed.

(3) The department will sample randomly, at locations independent of the contractor's QC work, collecting one sample at each QV location. The department will collect QV samples after the material has been bladed, mixed, and shaped but before compacting; except, for 3-inch aggregates, the department will collect samples from the stockpile at load-out. The department will split each sample, test half for QV, and retain half.

(4) The department will conduct QV tests in a separate laboratory and with separate equipment from the contractor's QC tests. The department will use the same methods specified for QC testing.

(5) The department will assess QV results by comparing to the appropriate specification limits. If QV test results conform to the specification, the department will take no further action. If QV test results are nonconforming, add the QV to the QC test results as if it were an additional QC test.

B.8.3 Independent Assurance

(1) Independence assurance is unbiased testing the department performs to evaluate the department's QV and the contractor's QC sampling and testing including personnel qualifications, procedures, and equipment. The department will perform an IA review according to the department's independent assurance program. That review may include one or more of the following:

1. Split sample testing.
2. Proficiency sample testing.
3. Witnessing sampling and testing.
4. Test equipment calibration checks.
5. Reviewing required worksheets and control charts.
6. Requesting that testing personnel perform additional sampling and testing.

(2) If the department identifies a deficiency, and after further investigation confirms it, correct that deficiency. If the contractor does not correct or fails to cooperate in resolving identified deficiencies, the engineer may suspend placement until action is taken. Resolve disputes as specified in B.9.

B.9 Dispute Resolution

(1) The engineer and contractor should make every effort to avoid conflict. If a dispute between some aspect of the contractor's and the engineer's testing program does occur, seek a solution mutually agreeable to the project personnel. The department and contractor may review the data, examine data reduction and analysis methods, evaluate sampling and testing procedures, and perform additional testing. Use ASTM E 178 to evaluate potential statistically outlying data.

(2) Production test results, and results from other process control testing, may be considered when resolving a dispute.

(3) If the project personnel cannot resolve a dispute, and the dispute affects payment or could result in incorporating non-conforming product, the department will use third party testing to resolve the dispute. The department's central office laboratory, or a mutually agreed on independent testing laboratory, will provide this testing. The engineer and contractor will abide by the results of the third party tests. The party in error will pay service charges incurred for testing by an independent laboratory. The department may use third party test results to evaluate the quality of questionable materials and determine the appropriate payment. The department may reject material or otherwise determine the final disposition of nonconforming material as specified in standard spec 106.5.

C (Vacant)

D (Vacant)

E Payment

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to this work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay. The department will administer pay reduction under the non-performance of QMP administrative item.

(2) For material represented by a running average exceeding a control limit, the department will reduce pay by 10 percent of the contract price for the affected Base Aggregate bid items listed in subsection A. The department will administer pay

reduction under the Nonconforming QMP Base Aggregate Gradation or Nonconforming QMP Base Aggregate Fracture Administrative items. The department will determine the quantity of nonconforming material as specified in B.7.2.

301-010 (20100709)

16. Protecting Concrete.

Add the following to standard spec 415.3.14:

Provide a minimum of one concrete finisher to remain on the project site after final finishing of all concrete surfaces until such time as the concrete has hardened sufficiently to resist surface scarring caused by footprints, handprints, or any other type of imprint, malicious or otherwise. The finisher shall actively and continuously patrol on foot the newly placed concrete, and repair any damage to the surface that might be sustained as described above.

The cost for providing the finisher(s), the necessary equipment, and materials shall be considered incidental to the contract unit price for each concrete item.

17. Reinforced Concrete Pipe Storm Sewers.

Add the following to standard spec 608.5:

Payment for the Storm Sewer Pipe Reinforced Concrete bid items also includes the removal and disposal of abandoned utility facilities necessary to complete the installation of the storm sewer pipes.

18. Manholes, Inlets and Catch Basins.

Construct manholes, inlets and catch basins according to standard spec 611 except as hereinafter modified:

Construct manholes, inlets and catch basins using only pre-cast or cast in place concrete masonry options. The brick masonry or concrete brick or block masonry options shall not be used.

Tuck point all inlet and outlet pipes using concrete conforming to standard spec 501. Mortar shall not be used for tuck pointing.

19. Insulation Board Polystyrene 2 Inch Item 612.0902.S.01.

A Description

This work consists of furnishing and installing extruded polystyrene insulation board for frost protection. Insulation board shall be installed for frost protection on sanitary service laterals, water service laterals, or other items as directed by the engineer.

B Materials
All insulation board materials shall conform to the ASTM Specifications latest designation specifications.

C Construction
Polystyrene insulation board shall be installed according to City of La Crosse Standard Specifications.

Insulation board shall be installed as directed by the engineer. Insulation board shall be placed on base of compacted sand that has been leveled and smoothed to give full support to the insulation board. The depth of installation shall be determined by the engineer. Insulation board shall extend a minimum of 2 feet past the outside if the pipe to be insulated. Backfill over the insulation board shall be a minimum of 6" of fine grain material before general backfill is placed.

D Measurement
The department will measure Insulation Board Polystyrene (size) in area by the square foot acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
602.0902.S.01	Insulation Board Polystyrene 2 Inch	SF

Payment is full compensation for furnishing all materials, including the sand base, fine grain backfill, and incidentals necessary to complete the work according to the contract.

20. Furnishing and Planting Plant Materials.

The work under this item shall be according to the plans, standard spec 632, as shown on the plans, and as hereinafter provided.

Add the following to standard spec 632.2.1:

All plants shall be grown within the states of Wisconsin, Minnesota, Michigan, or parts of northern Illinois, Indiana or Ohio located within Zones 4 and 5 of the "Plant Hardiness Zone Map" produced by the United States Department of Agriculture, Miscellaneous Publication No. 1475, issued January, 1990, unless otherwise approved by the engineer.

Standard spec 632.2.2.8 is modified as follows:

A list of sources for plants shall be furnished according to standard spec 632.2.2.8 before planting begins for fall-planted plants and before March 15 for spring-planted plants. All sources will be subject to verification by the engineer.

Add the following to standard spec 632.2.3.4:

Planting mixture blend shall be reviewed and approved by the engineer or construction representative before use on project. The engineer reserves the right to reject planting mixture that does not conform to the specifications and/or does not come with the appropriate material certificates. The engineer may require the contractor to take samples (for USDA soil texture classification, pH, % organic matter, nutrient content, cation exchange capacity, soluble salts, and the presence of any materials deleterious to plant growth) and provide testing through a qualified testing laboratory approved by the State of Wisconsin to confirm that topsoil meets the requirements outlined in standard spec 625.

Modify standard spec 632.2.4.2 as follows:

For fertilizer used in plant holes, provide a three-year release, water-soluble fertilizer contained in a micropore slow release polyethylene packet. Each packet shall contain two ounces of fertilizer. A single 2-ounce packet is considered one unit. The fertilizer shall conform to the following minimum requirements:

Nitrogen, not less than ----- 16%
Phosphoric Acid, not less than ----- 8%
Potash, not less than -----8%

For trees: The contractor shall use a minimum of two units and shall provide two units per caliper inch of tree trunk diameter. For one-half caliper measurements, the contractor shall round up. For example, a 2 ½" caliper tree should receive six units of fertilizer.

For shrubs: The contractor shall use a minimum of two units and shall provide one unit per 12 inches of plant height or spread.

Add the following to standard spec 632.2.6:

Shredded Hardwood Bark Mulch for mulch rings around the base of plant material shall be finely shredded hardwood bark mulch and shall be the product of a mechanical chipper, hammermill, or tub grinder. The material shall be fibrous and uniformly dark brown in color, free of large wood chunks, and shall be substantially free of mold, dirt, sawdust, and foreign material. No portion of the material shall be in an advanced state of decomposition. The material shall not contain chipped up manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. The material shall contain no bark of the black walnut tree. The material, when air dried, shall all pass a 4-inch screen and no more than 20 percent by mass of the material shall pass a 0.10-inch sieve. Unattached bark or greenleaf composition, either singly or combined, shall not exceed 20 percent each by mass. The maximum length of individual pieces shall not exceed 4 inches.

Contractor shall supply source of shredded hardwood bark mulch to the engineer. All sources will be subject to verification and approval by the engineer.

Modify standard spec 632.2.7 as follows:

Do not use wrapping on plant material.

Modify standard spec 632.2.9 as follows:

Provide rodent protection for trees as needed and only as approved by engineer.

Rodent protection shall be rigid plastic mesh made of recycled HDPE with an open mesh matrix ¾" by ¾" with each strand approximately 1/8" x 1/8" x 1/8". Product shall be UV treated and shall have a life expectancy of up to five years. Protection shall be 48 inches high. Contractor shall supply source of rodent protection to the engineer. All sources will be subject to verification and approval by the engineer.

Contractor shall use granular or similar rodent bait for shrub and perennial beds as needed and only as approved by engineer.

Add the following to standard spec 632.2.10:

Contractor shall use 18" long soft polymer webbing strap with grommets at end of the two ends to secure wire or twine to tree. Contractor shall supply source of webbing straps to the engineer. All sources will be subject to verification and approval by the engineer.

The contractor shall provide tree stabilization for all trees:

- As indicated in the Plant Data Table;
- Planted on slopes greater than 4:1;
- Planted in areas prone to high winds;
- Planted in areas prone to flooding or with seasonally saturated soils;
- At the discretion of the landscape contractor to ensure viable, healthy plantings;
- At the discretion of the engineer.

Modify standard spec 632.3.1 as follows:

The normal spring planting season for all plants shall extend to June 15. The normal fall planting season begins September 15 and shall be completed by November 15 or up until the ground is frozen. Planting of evergreen trees and shrubs, and perennials in the fall shall be completed by October 15. If the overall construction schedule dictates that planting will occur between June 15 and September 15, the landscape contractor must first obtain approval from the engineer to begin installation outside of the normal planting seasons. If the engineer grants approval of the request, the contractor will also be held fully responsible for any and all additional maintenance associated with planting outside of the normal planting seasons including, but not limited to, supplemental watering above and beyond the typical, specified landscape maintenance and care cycle schedule.

Add the following to standard spec 632.3.1:

Contractor shall take care not to damage or disturb adjacent finished landscape and will be responsible for seeding or sodding to repair any and all damage caused to adjacent seeded and/or sodded areas.

Add the following to standard spec 632.3.3:

Landscape contractor shall stake out locations of all plant holes and obtain approval of staked location from construction representative or engineer prior to planting. Notify construction representative or engineer immediately of any discrepancies between the landscape working drawings and actual built condition of sidewalks, curbs, etc. that may affect placement of plant material. Obtain approval prior to planting in revised locations.

Add the following to standard spec 632.3.4:

Ensure that the bottom of the hole is adequately compacted to guard against settling. Tamp or water in as necessary to create a condition by which plants will not settle in the planting beds. The bottom of the root ball shall be in direct contact with the bottom of the hole.

Revise standard spec 632.3.4 as follows:

The minimum horizontal measurement of the plant hole shall be no less than 24 inches greater than the diameter of the ball, container, or root mass for the full depth of the planting hole.

Add the following to standard spec 632.3.7:

Remove the burlap and other wrapping materials including, but not limited to, twine, wire baskets, and plastic ribbon, from the entire root ball of B&B plants unless engineer determines that removal of said material will be detrimental to plant stability and/or establishment.

Revise standard spec 632.3.18.1.1 and standard spec 632.3.18.1.2 as follows:

The plant establishment period shall be two years and shall begin and end on the date of substantial landscape completion as determined by the engineer.

Add the following to standard spec 632.3.19.1:

The contractor shall remove all staking, bracing wire material, and other plant stabilization material at the end of the required establishment period.

The contractor shall leave in place all rodent protection measures at the end of the required establishment period.

The interval for a care cycle shall be 10-14 days between April 15 and October 31. There will be 13 required care cycles in a growing season.

The contractor shall provide supplemental water during the April 15 to October 31 maintenance period as often as necessary to ensure healthy, thriving, and established plant material. The contractor will remain solely responsible for plant health and watering maintenance even in the event of irrigation system installation.

21. Landscape Planting Surveillance and Care Cycles.

If the care specialist fails to perform any of the required care cycles as specified in standard spec 632.3.19.1, the department will assess daily damages in the amount of $200 to cover the cost of performing the work with other forces. The department will assess these damages for each day the requirements of the care cycle remain incomplete, except when the engineer extends the required time period.
632-005 (20070510)

22. Wood and Tubular Steel Sign Posts.

Add the following to standard spec 634.3:

For sign posts located in concrete or asphalt pavement areas fill void in box out with clean sand.

23. Traffic Control.

Add the following to standard spec 643.3.1:

Lighting devices shall be covered or rendered inoperative when not in use.

Provide to the engineer, City of La Crosse Police Department, and the State Patrol District Headquarters responsible for that county with the current telephone number(s) which the contractor or their representative can be contacted at all times in the event a safety hazard develops. Repair, replace or restore the damaged or disturbed traffic control devices within two hours from the time notified or made aware of the damaged or disturbed traffic control devices.

No operations shall take place until all traffic control devices for such work are in the proper locations.

24. Temporary Pedestrian Surface Plywood, Item 644.1420.S.

A Description
This special provision describes providing, maintaining, and removing temporary pedestrian surface.

B Materials

Furnish 1 1/4-inch dense graded aggregate conforming to standard spec 305.2. Furnish:

- Pressure treated 2x4 framing lumber, pressure treated 3/4-inch plywood with skid resistant surface coating, and weather resistant deck screws 3-1/2-inch minimum for framing and 1-5/8-inch minimum for plywood.

C Construction

Place, compact, and level a dense graded aggregate foundation before placing the surface.

Provide a firm, stable, and slip-resistant surface layer with vertical joints no higher than 1/4 inch and horizontal joints no wider than 1/2 inch. Sheet materials up to 1 inch thick may be lapped if the edge is beveled at 45 degrees or flatter. Construct conforming to the following:

- Framed plywood panels 4 feet wide with a skid resistant surface coating.

Align parallel to the existing roadway grade or, if outside of a street or highway right-of-way, do not exceed 5 percent longitudinal slope. Provide cross slope of 1 to 2 percent unless the engineer approves a steeper cross slope in writing.

Maintain the surface with a 4-foot minimum clear width and the specified joint and slope requirements. Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 203.3.4 when no longer required.

D Measurement

The department will measure Temporary Pedestrian Surface Plywood by the square foot, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
644.1420.S	Temporary Pedestrian Surface Plywood	SF

Payment is full compensation for providing, maintaining, and removing temporary pedestrian surface.

644-010 (20150630)

25. Temporary Curb Ramp, Item 644.1601.S.

A Description

This special provision describes providing, maintaining, and removing temporary curb ramps.

B Materials
Furnish materials as follows:

- Asphaltic surface conforming to standard spec 465.2.
- Engineer-approved ready mixed concrete or ancillary concrete conforming to standard spec 602.2 except no QMP is required.
- Commercially available prefabricated curb ramps conforming to Americans with Disabilities Act Accessibility Guidelines.

Furnish yellow detectable warning fields conforming to Americans with Disabilities Act Accessibility Guidelines. Use either an engineer-approved surface-applied type or cast iron from the department's approved products list.

C Construction
Provide and maintain temporary curb ramps, including detectable warning fields, throughout the project duration. Place and compact a dense graded aggregate foundation before placing the curb ramp, unless the curb ramp is to be placed on existing roadway surface.

Remove and dispose temporary curb ramps and associated detectable warning fields when no longer required.

D Measurement
The department will measure temporary curb ramps by each individual ramp, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
644.1601.S	Temporary Curb Ramp	Each

Payment is full compensation for providing, maintaining, and removing temporary curb ramps.
644-020 (20150630)

26. Temporary Pedestrian Safety Fence, Item 644.1616.S.

A Description
This special provision describes providing, maintaining, and removing the temporary pedestrian safety fence.

B Materials
Furnish notched metal “T” or “U” shaped fence posts weighing 1 1/3 pounds per foot or more.

Furnish select 2x4 dimensional lumber.

Furnish fence fabric meeting the following requirements.

Color:	International orange (UV stabilized)
Roll Height:	4 feet
Mesh Opening:	1-inch min to 3-inch max
Resin/Construction:	High density polyethylene mesh
Tensile Yield:	Avg. 2000 lb per 4-ft. width (ASTM D638)
Ultimate Tensile Strength:	Avg. 3000 lb per 4-ft. width (ASTM D638)
Elongation at Break (%):	Greater than 100% (ASTM D638)
Chemical Resistance:	Inert to most chemicals and acids

The engineer may allow prefabricated fencing systems conforming to Americans with Disabilities Act Accessibility Guidelines.

C Construction

Provide a continuous safety fence with the top edge free of sharp or rough edges.

Repair or reconstruct installations disturbed during construction operations. Remove and dispose of as specified in standard spec 204.3 when no longer required.

D Measurement

The department will measure Temporary Pedestrian Safety Fence by the linear foot, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
644.1616.S	Temporary Pedestrian Safety Fence	LF

Payment is full compensation for providing, maintaining, and removing the temporary pedestrian safety fence.

644-025 (20150630)

27. General Requirements for Electrical Work.

Append standard spec 651.2, Materials, with the following:

(7) The approved products list is located at:
http://www.dot.wisconsin.gov/business/engrserv/electric/index.htm

Replace standard spec 651.3.3 (3) with the following:

(3) Request a signal inspection of the completed signal installation to the engineer at least five working days prior to the time of the requested inspection. Notify the City of La Crosse Traffic Engineer at (608) 789-7505 to coordinate the inspection.

28. Traffic Signal Timing Parameters – STH 16 and 5th Avenue South.

The traffic signal at the STH 16 intersection with 5th Avenue South shall be fully operational, as shown in the "Sequence of Operations" sheets in the plan set. The traffic signal controller shall be timed according to the following inputs:

TRAFFIC SIGNAL TIMING
STH 16 and 5th Avenue South

Phase Data	N	Phase 2	Phase 4	Phase 6	Phase 8
		↑	←	↓	→
Approach Name		5th Ave. S NB	STH 16 WB	5th Ave. S SB	STH 16 EB
Vehicle Basic Timings					
Minimum Green (sec.)		11.0	11.0	11.0	11.0
Max 1		36.0	34.0	36.0	34.0
Yellow Change (sec)		3.0	3.0	3.0	3.0
Red Clearance (sec)		2.0	2.0	2.0	2.0
Pedestrian Timings					
Walk (sec)		3.0	3.0	3.0	3.0
Ped Clearance (sec)		8.0	8.0	8.0	8.0
Miscellaneous					
Vehicle Recall		Max	Max	Max	Max

Split Times and Phase Mode

Pattern	Cycle Length (s)	Offset (s)	Phase 2 5TH AVE S NB		Phase 4 STH 16 WB		Phase 6 5TH AVE S SB		Phase 8 STH 16 EB	
D/S/O			Split (s)	Mode	Split (s)	Mode	Split (s)	Mode	Split (s)	Mode
1/1/1	70	53	36	MAX	34	MAX	36	MAX	34	MAX
2/1/1	70	50	36	MAX	34	MAX	36	MAX	34	MAX

Traffic Event Data

Schedule			Pattern
Day	Hour	Minute	
1	1	30	5/5/0
1	5	30	1/1/1
2	1	30	5/5/0
2	5	30	1/1/1
2	13	30	1/1/1
2	14	30	2/1/1
2	18	0	1/1/1

Equate Days

Day of Week	Day Number
Sunday	1
Monday	2
Tuesday	2
Wednesday	2
Thursday	2
Friday	2
Saturday	1

The traffic signal controller shall be programmed with the following preemption parameters:

EPAC ALL PREEMPT DATA

RING TIMES…… 1	2	3	4		
MIN GRN/WALK…… 5	5	5	5		
PRIORITY…. FL	1/2	2/3	3/4	4/5	5/6
STATUS 1	1	1	1	1	1

EPAC PREEMPT 1 MISC DATA

TEST : 0	N-LOCK : 1	LINK PE#	: 0
DELAY : 0	EXTEND : 0	DURATION	: 0
	MXCALL : 0	LOCK OUT	: 0

PHASE……	1	2	3	4	5	6	7	8
EXIT…….	0	0	0	1	0	0	0	1
CALLS….	0	0	0	0	0	0	0	0

EPAC PREEMPT 1 INTERVAL TIMES

SEL PED CLR	: 05	TRK YEL/10	: 30
SEL YEL/10	: 30	TRK RED/10	: 00
SEL RED/10	: 00	DWELL GREEN	: 05
TRACK GREEN	: 05	RET PED CLR	: 05
TRK PED CLR	: 00	RET YEL/10	: 40
		RET RED/10	: 20

EPAC PREEMPT 1 VEHICLE STATUS

PHASE……1	2	3	4	5	6	7	8
TRK GRN….. 0	0	0	1	0	0	0	1
DWELL……..0	1	0	0	0	1	0	0
CYCLE…….. 0	0	0	0	0	0	0	0

EPAC PREEMPT 1 PEDESTRIAN STATUS

PHASE…….	1	2	3	4	5	6	7	8
TRK GRN……	0	0	0	0	0	0	0	0
DWELL……...	0	0	0	0	0	0	0	0
CYCLE…….	0	0	0	0	0	0	0	0

EPAC PREEMPT 1 OVERLAP STATUS

OVERLAP.....	ALL
TRK GRN.....	4
DWELL……	4
CYCLE…….	0

EPAC LOW PRIORITY DATA

TEST	: 0		N-LOCK	: 0		SKIP		: 0
DELAY	: 0		EXTEND	: 0		DURATION		: 0
DWELL	: 0		MXCALL	: 0		LOCK OUT		: 0
PHASE…….....	1	2	3	4	5	6	7	8
DWELL……..	0	0	0	1	0	0	0	1
CALLS……....	0	0	0	0	0	0	0	0

Preempt sequence 1 shall correspond to preemption detector head "A" as shown in the traffic signal plan sheets.

The EPAC controller shall be programmed with the address 014 for use with the Central Business District master controller operated by the City of La Crosse, WI. Coordinate any master controller coordination with Matthew Gallager at the City of La Crosse at (608) 789-7392.

All work required to install traffic signal timing, perform test operations, and make updates shall be considered incidental to the bid items of "Furnish and Install Traffic Signal Cabinet and Controller STH 16 and 5th Avenue South, Item SPV.0105.63" and Remove and Salvage EVP Equipment STH 16 and 5th Avenue South, Item SPV.0105.64.

29. Electrical Service Meter Breaker Pedestal (CB100), Item 656.0200.01; Electrical Service Meter Breaker Pedestal (CB1), Item 656.0200.02.

Amend standard spec 656.2.3, Meter Breaker Pedestal Service, by adding the following paragraph:

(2) Furnish meter pedestal with black painted finish. Paint meter pedestal using an epoxy primer and topcoat to match the lighting and signal control cabinet finish.

30. Traffic Signal Face, 3-12 Inch Vertical, Item 658.0110; Traffic Signal Face, 3-12 Inch Horizontal, Item 658.0155; Backplates Signal Face, 3-12 Inch, Item 658.0215; Pedestrian Signal Face 16 Inch, Item 658.0416.

Replace standard spec 658.2.2.2, Signal Housings and Backplates, paragraph (1) to read as follows:

(1) Furnish polycarbonate resin housings, doors, visors, and backplates. Use black Federal Standard color for all housings and dull black door faces, visors, and backplates. Ensure that the door is sized for 12-inch nominal diameter lenses and is held shut with eyebolts secured with wing nuts. Use cut away or tunnel type visors as the plans show. Use flat backplates that project 5 inches beyond all sides of the signal housing.

Furnish traffic signal and pedestrian signal faces as listed on the Qualified Products list and as manufactured by Eagle (Siemens).

31. Signal Mounting Hardware STH 16 & 5th Avenue S, Item 658.5069.01.

Amend standard spec 658.2.1, Signal Mounting Hardware, by adding the following paragraph:

(7) Furnish banding and mounting brackets which conform to the perimeter of smooth and fluted poles depending on the location. All mounting hardware, banding and other visible components shall be black in color. If a black factory finish is not available, repaint banding and mounting brackets using an epoxy primer and topcoat to match the Decorative Street Light Assembly finish.

32. Lighting Control Cabinets 120/240 30-Inch, Item 659.2130.

Amend standard spec 659.2, Materials, by adding the following paragraph:

(2) Exterior surfaces and hardware shall be pretreated with an iron phosphate coating and powder coat painted black and dried by radiant heat.

Amend standard spec 659.3,5 Lighting Control Cabinet, by adding the following paragraph:

(2) Furnish a cabinet designed to house all electrical components as required per the standard specifications and standard detail drawings as well as fiber optic and communications equipments as required. A fiber optic splice enclosure and ethernet switch may be placed in this cabinet. Ethernet switch shall be din-rail mounted if located within the cabinet. Locate and mount all equipment within the cabinet in a manner that allows for operation of all components and maintains all applicable code and clearance requirements.

33. Seismograph, Item 999.1000.S.

A Description

This special provision describes furnishing a seismograph and employing trained operators to continuously monitor building vibration.

B Material
Use seismographs as specified in ILHR 7.63, and are continuous strip recorders supplied with all the accessories necessary for making seismographic observations.

C Construction
Monitoring procedures shall be as specified in ILHR 7.64 and the following: Take seismograph readings prior to construction activities to establish an ambient index.

Place the seismograph to continuously monitor all construction activities or as directed by the engineer. If construction activities generate ground vibration in excess of the Peak Particle Velocity Limits as shown in ILHR 7.64, stop the construction operation in progress and consider and implement alternate construction methods.

D Measurement
The department will measure Seismograph as a single complete lump sum unit of work, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
999.1000.S	Seismograph	LS

Payment is full compensation for furnishing and operating a seismograph, an operator, and accessories.
999-005 (20150630)

34. Crack and Damage Survey, Item 999.1500.S.

A Description
This special provision describes conducting a crack and damage survey of all residences and businesses located along both sides of Cass Street between Station 100+22 and Station 113'BLN'+99.

This Crack and Damage Survey shall consist of two parts. The first part, performed prior to construction activities, shall include a visual inspection, photographs, and a written report describing the existing defects in the building(s) being inspected. The second part, performed after the construction activities, shall also include a visual inspection, photographs, and written report describing any change in the building's condition.

B (Vacant)

C Construction
Prior to any construction activities, thoroughly inspect the building structures for existing defects, including interior and exterior walls. Submit a written report of the inspector's name, date of inspection, descriptions and locations of defects, and photographs. The intent of the written report and photographs is to procure a record of the general physical

condition of the building's interior and exterior walls and foundation. The report shall be typed on bond paper and be in text form.

The photographs shall be taken by a professional photographer capable of producing sharp, grain free, high-contrast colored pictures with good shadow details. The photographs shall be 3½ inch by 5 inch color prints, glossy, and mounted in protective storage pages with clear slip-in pockets and clear background. Each sheet shall hold four prints. The back of each photograph shall contain the following information:

ID _____
Building Location _____
View looking _____
Date _____
Photographer _____

Prior to the start of any construction activities pertinent to this survey, submit a copy of the written report and photographs to the engineer.

After the construction activities are complete, conduct another survey in the same manner, take photographs, and submit another written report to the engineer.

In lieu of photographs, a professional videographer may be hired to use a video camera capable of producing a video with the clarity required to perform this work.

D Measurement
The department will measure Crack and Damage Survey as single complete unit of work.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
999.1500.S	Crack and Damage Survey	LS

Payment is full compensation for providing the before and after written reports, and for photographs or video.
999-010 (20130615)

35. Planting Mixture, Item SPV.0035.60.

A Description
This special provision describes furnishing and installing Planting Mixture at the locations shown on the plans and according to the requirements of standard spec 632, the plans, and as hereinafter provided.

B Materials
The landscape contractor who is responsible for furnishing and installing plant material shall also be solely responsible for obtaining planting mixture components, blending the mixture to the specified proportions, and for furnishing and installing the planting mixture.

B.1 Planting Mixture

The planting mixture consists of the following blend by volume:

2 parts topsoil. Topsoil shall conform to standard spec 625.

1 part sand. Obtain the engineer's approval for the sand.

1 part compost. Compost shall be either well-rotted shredded leaf mulch, free of disease; or well-rotted, unbleached, stable or cattle manure containing no more than 25 percent by volume of straw, sawdust, or other bedding materials and free of toxic substances. Either shall be free of stones, sticks, soil, weed seeds, debris, and other material harmful to plant growth.

1 part peat moss. Peat moss shall conform to standard spec 632.

C Construction

C.1 Coordination

Planting Mixture shall be delivered to project site and installed no more than seven days before the start of planting operations for areas receiving Planting Mixture. It is the sole responsibility of the landscape contractor to fully coordinate and schedule the delivery and installation of the Planting Mixture with the delivery and installation of all landscape plant materials.

C.2 Planting Mixture Preparation and Placement

Contractor shall provide, in writing to the engineer, a list of all materials used in Planting Mixture including manufacturers and quantities and shall ensure that all materials meet the standards set forth in standard spec 625 and 632 and produce a planting mixture that provides a stable, healthy soil for plant growth.

Ensure proper excavation of planting area for all areas to receive Planting Mixture. Prepare areas by removing any construction materials, stone, or other debris larger than 2" in length or diameter for all areas.

Provide Planting Mixture for the central islands of roundabouts and for specialized planting beds as indicated in the plans.

Provide Planting Mixture over entire planting bed area and fine grade to match grades as indicated on plans or to adjacent back of curb or other hardscape surface as indicated on plans and account for settling. Place Planting Mixture in 6-inch to 8-inch lifts, watering in or tamping to reduce settling potential. A minimum of 24" depth shall be provided in the central islands of roundabouts and for specialized perennial beds as indicated in the plans.

Obtain approval of Planting Mixture depths, locations, and elevations by supervising engineer prior to planting.

D Measurement

The department will measure Planting Mixture by the cubic yard, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0035.60	Planting Mixture	CY

Payment is full compensation for excavating existing material out, and for furnishing and installing all materials.

36. Catch Basins 4-FT Diameter Special, Item SPV.0060.01.

A Description
This special provision describes furnishing and constructing special catch basins as shown in the plans, the appropriate requirements of standard spec 611, and as hereinafter provided.

B Materials
Materials shall be according to standard spec 611.2. The rubber adjustment riser is to be on the department's approved product list.

C Construction
Construct according to the plans and standard spec 611.3.

Replace standard spec 611.3.3(1) with the following:

Set inlet cover on rubber adjustment riser ring. Use approved mastic adhesive between the ring and the inlet structure. Use an approved polyurethane adhesive with a flexible set between the ring and the inlet cover. Use two 5/16-inch beads of adhesive placed 1 inch and 2 inches in from the outside edge of the ring. If multiple adjustment rings are necessary, a maximum of two adjustment rings can be used. A maximum of 3 inch adjustment is allowed. Use polyurethane adhesive with a flexible set to join the two rings. If the adjustment rings must be cut, the joints must be staggered and a polyurethane adhesive used to reattach the cut ends. No concrete adjustment rings or mortar is to be placed between the top of the structure and the inlet cover.

D Measurement
The department will measure Catch Basins 4-FT Diameter Special as each individual catch basin, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Catch Basins 4-FT Diameter Special	Each

Payment shall be according to standard spec 611.5 of the standard specifications.

37. Posts Steel U-Channel 10-FT, Item SPV.0060.02; Posts Steel U-Channel 12-FT, Item SPV.0060.03.

A Description
This special provision describes furnishing and installing steel u-channel posts as shown in the plans, the appropriate requirements of standard spec 634, and as hereinafter provided.

B Materials
Furnish 2-lbs per foot rib steel u-channel posts with black enamel paint finish

The engineer will inspect sign posts before installation. Replace scratched or otherwise damaged posts at no expense to the department.

C Construction
Construct according to the plan details and the appropriate requirements of standard spec 634.3.

D Measurement
The department will measure Posts Steel U-Channel (size) as each individual post, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Posts Steel U-Channel 10-FT	Each
SPV.0060.03	Posts Steel U-Channel 12-FT	Each

Payment is full compensation for providing, hauling and placing the posts; treating cut ends; for excavating and backfilling post holes; and for removing and disposing of surplus material.

38. Install V-Loc Post Anchors, Item SPV.0060.04.

A Description
This special provision describes installing city-furnished V-Loc post anchor system as shown in the plans and as hereinafter provided.

B Materials
The City of La Crosse will furnish the TAPCO V-Loc post anchors, Model 19-VR1U. The city will deliver the V-Loc anchors to the project site. Contact Mike La Fleur, City of La Crosse Street Department Superintendent, (608) 789-7305, at least two weeks prior to needing the V-Loc anchors.

C Construction
Install the city-furnished V-Loc anchors and adapters according to the installation guidelines on the TAPCO website:

http://www.tapconet.com

D Measurement
The department will measure Install V-Loc Post Anchors as each individual anchor, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.04	Install V-Loc Post Anchors	Each

Payment is full compensation for installing the anchors and adapters; for excavating and backfilling box out holes; and for removing and disposing of surplus material.

39. Install Manhole Covers, Item SPV.0060.05.

A Description
This special provision describes installing city-furnished manhole castings and lids as shown in the plans and as hereinafter provided.

B Materials
The City of La Crosse will furnish the manhole covers including the castings and lids. The city will deliver the manhole covers to the project site. Contact Mike La Fleur, City of La Crosse Street Department Superintendent, (608) 789-7305, at least two weeks prior to needing the manhole covers.

C Construction
Install the city-furnished manhole covers according to the appropriate requirements of standard spec 611.3.

D Measurement
The department will measure Install Manhole Covers as each individual manhole cover, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.05	Install Manhole Covers	Each

Payment is full compensation for removing and salvaging the existing covers; for hauling, installing and adjusting the manhole covers; and for providing the mortar and necessary material for adjusting; Old covers removed remain the municipality's property.

40. Salvaged Metal Railing, Item SPV.0060.06.

A Description
This special provision describes salvaging and reinstalling metal railing as shown in the plans and as hereinafter provided.

B (Vacant)

C Construction
Excavate and salvage the steel railing from the location shown in the plans. If concrete bases are attached to the bottom of the railing below the existing ground then leave the concrete bases attached to the railing and salvage the concrete base along with the railing.

Carefully store the railing at a location approved by the engineer until the railing can be reinstalled at the new location. Any damage to the railing resulting from the removal and salvaging operations shall be repaired or replaced in-kind at the contractor's expense.

Reinstall the railing and attached concrete bases, if present, at the location shown in the plans. Field verify height of railing above existing sidewalk and reinstall at the same height above the new sidewalk. Construct new concrete bases if existing concrete bases are present and are damaged during salvaging operations.

D Measurement
The department will measure Salvaged Metal Railing as each individual salvaged railing, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.06	Salvaged Metal Railing	Each

Payment is full compensation for salvaging, hauling, storing, and reinstalling the existing metal railing and concrete bases, if present; for excavating and backfilling; for replacing damaged concrete bases, if present; and for removing and disposing of surplus material.

41. Corporation Stop 1-Inch, Item SPV.0060.20; Corporation Stop 1¼-Inch, Item SPV.0060.21; Corporation Stop 1½-Inch, Item SPV.0060.22; Curb Stop 1-Inch, Item SPV0060.23; Curb Stop 1¼-Inch, Item SPV.0060.24; Curb Stop 1½-Inch, Item SPV.0060.25.

A Description
This work consists of furnishing and installing a corporation stop and curb stop of the size indicated, excavating, setting new curb box with rod and sidewalk access casting, connection of new service pipe, and connecting the existing service pipes including

transition fittings according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications.

Standard transition fittings for 1-Inch Curb Stops to ¾-Inch service pipe shall be furnished.

Approved manufactures of service brass items are Ford Meter Box, Mueller, A.Y. McDonald or an approved equal.

Sidewalk access casting to be furnished by the La Crosse Water Utility.

C Construction
Corporation Stops shall be furnished, installed, and tested according to City of La Crosse standard specifications. The exact location shall be set at the time of installation. Each shall be inspected before backfill.

D Measurement
The department will measure Corporation Stop (size) and Curb Stop (size) as each individual stop, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.20	Corporation Stop 1-Inch	Each
SPV.0060.21	Corporation Stop 1¼-Inch	Each
SPV.0060.22	Corporation Stop 1½-Inch	Each
SPV.0060.23	Curb Stop 1-Inch	Each
SPV.0060.24	Curb Stop 1¼-Inch	Each
SPV.0060.25	Curb Stop 1½- Inch	Each

Payment is full compensation for mechanical joints, and adjustment of valve box and sidewalk access casting elevations to match flush with sidewalk, pavement, or finished grades within the work area.

42. Service Tap 4-Inch, Item SPV.0060.26; Service Valve 4-Inch, SPV.0060.27.

A Description
This work consists of furnishing and installing a water service tap and water service valve of the size indicated, excavating, setting new service valve with box, sidewalk access casting, connection of new service pipe, and connecting the existing service pipes, including transition fittings and mechanical joint restraints, and included in the cost bid of

valves, all according to the requirements of the plans, the standard specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications.

Standard fittings for 4-Inch water service pipe shall be furnished.

Approved manufactures of service brass items are Ford Meter Box, Smith –Blair or an approved equal.

Joint restraints shall be Meg A Lug wedge action type joint restraints manufactured by EBBA Iron Sales or an approved equal.

Sidewalk access casting shall be furnished by the La Crosse Water Utility.

C Construction
Service Tap and Service Valve shall be furnished, installed, and tested according to City of La Crosse Standard Specifications. The exact location shall be set at the time of installation. Service Tap and Service Valve shall be inspected before backfill.

D Measurement
The department will measure Service Tap (size) and Service Valve (size) as each individual tap or valve, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.26	Service Tap 4-Inch	Each
SPV.0060.27	Service Valve 4-Inch	Each

Payment is full compensation for mechanical joints, and adjustment of sidewalk access casting, valve box elevations to match flush with sidewalk, pavement, or finished grades within the work area.

43. Hydrant, Item SPV.0060.28.

A Description
This work consists of furnishing and installing fire hydrants including excavating, setting new hydrants, stone drain material, joint restraint, connection of hydrant to hydrant lead including fittings, mechanical joint restraints, at the hydrant and included in the cost bid for hydrants, backfill and compaction, all according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications.

Approved hydrant manufacturer is Waterous Pacer or an approved equal.

Joint restraints shall be Meg A Lug wedge action type joint restraints manufactured by EBBA Iron Sales or an approved equal.

C Construction
Hydrants shall be furnished, installed, and tested accordance with City of La Crosse Standard Specifications. The exact location shall be set at the time of installation. Hydrants shall be inspected before backfill.

D Measurement
The department will measure Hydrant as each individual hydrant, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.28	Hydrant	Each

Payment is full compensation for furnishing all work including back filling, mechanical joints, and adjustment of hydrant elevations to meet minimum height above sidewalk, pavement, or finished grades within the work area.

44. Hydrant Control Valve 6 Inch, Item SPV.0060.29.

A Description
This work consists of furnishing and installing Hydrant Control Valves. Valves to be resilient seat (R.S.) wedge gate valves with road box of the size and class specified, for fire hydrant control include all fittings and joint restraint according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications.

Valves to be furnished shall be new meeting the requirements of the Standard specifications. Valves to be installed complete with road box.

Approved manufactures of valves are American Darling, Kennedy, Mueller, M & H (Dresser), Waterous, Clow, U.S Pipe Meto Seal, or an approved equal.

Joint restraints shall be Meg A Lug wedge action type joint restraints manufactured by EBBA Iron Sales or an approved equal.

C Construction
Hydrant Control Valve 6 Inch, to be R.S. Wedge Valves with Road Box shall be furnished, installed, and tested according to City of La Crosse Standard Specifications. The exact location shall be set at the time of installation. Valves shall be inspected before backfill.

D Measurement
The department will measure Hydrant Control Valve (size) as each individual valve, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.29	Hydrant Control Valve 6 Inch	Each

Payment is full compensation for furnishing all work including blocking, mechanical joints, joint restraint, and adjustment of valve box elevations to match flush with sidewalk, pavement, or finished grades within the work area.

45. Nitrile Gaskets – Hydrant Lead 6 Inch, Item SPV.0060.30.

A Description
This work consists of furnishing and installing nitrile gaskets in fire hydrant leads when the hydrant and/or hydrant lead is installed in soil contaminated with hydrocarbon compounds, all according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications.

Gasket material shall be Nitrile G and shall comply with the AWWA Specifications latest designation specifications.

Approved manufactures of gaskets are American Pipe, Tyton - U.S Pipe, or an approved equal.

C Construction
Nitrile Gaskets shall be furnished and installed when directed by the engineer, and according to City of La Crosse Standard Specifications.

D Measurement
The department will measure Nitrile Gaskets – Hydrant Lead 6 Inch as each individual gasket, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.30	Nitrile Gaskets – Hydrant Lead 6 Inch	Each

Payment is full compensation for furnishing all work including recording the location of each gasket installed.

46. Salvage Hydrant, Item SPV.0060.31.

A Description
This work consists of removing fire hydrants and storing them for pick-up by the La Crosse Water Utility.

B (Vacant)

C (Vacant)

D Measurement
The department will measure Salvage Hydrant as each individual hydrant salvaged and acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.31	Salvage Hydrant	Each

Payment is full compensation for furnishing all work all work including removing the hydrant and moving to storage and security.

47. R.S. Wedge Valve 16 Inch, Item SPV.0060.32; R.S. Wedge Valve 12 Inch, Item SPV.0060.33; R.S. Wedge Valve 8 Inch, Item SPV.0060.34; R.S. Wedge Valve 6 Inch, Item SPV.0060.35.

A Description
This work consists of furnishing and installing R.S. Wedge Valves with the new water main, complete including road box of the size and class specified, furnishing and installing all fittings and joint restraint according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications.

Valves to be furnished shall be new meeting the requirements of the Standard specifications. Valves to be installed complete with road box.

Approved manufactures of valves are American Darling, Kennedy, Mueller, M & H (Dresser), Waterous, Clow, U.S Pipe Meto Seal, or an approved equal.

R. S. Wedge Valves to include mechanical joint restraint shall be installed at valves and included in the cost bid of valves.

Joint restraints shall be Meg A Lug wedge action type joint restraints manufactured by EBBA Iron Sales or an approved equal.

C Construction
R.S. Wedge Valves shall be furnished and installed with the new water main, and tested according to City of La Crosse Standard Specifications. The exact location shall be set at the time of installation. Each shall be inspected before backfill.

D Measurement
The department will measure R.S. Wedge Valve (size) as each individual valve, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.32	R.S. Wedge Valve 16 Inch	Each
SPV.0060.33	R.S. Wedge Valve 12 Inch	Each
SPV.0060.34	R.S. Wedge Valve 8 Inch	Each
SPV.0060.35	R.S. Wedge Valve 6 Inch	Each

Payment is full compensation for furnishing all work including blocking, mechanical joints, joint restraints, and adjustment of valve box elevations to match flush with sidewalk, pavement, or finished grades within the work area.

48. Connect to Existing 16 Inch Water Main / Valve, SPV.0060.36; Connect to Existing 12 Inch Water Main, SPV.0060.37; Connect to Existing 8 Inch Water Main, SPV.0060.38; Connect to Existing 6 Inch Water Main, SPV.0060.39.

A Description
This item of work consists of connecting to the existing water main of the size and method specified, furnishing specified fittings at locations shown on plans, and as hereinafter provided**.**

B Materials
Work and materials under this item shall be according to the Standard Specifications for Water Main Construction, City of La Crosse, Wisconsin, (City Specifications revised January 1993).

All fittings shall be cement lined, compact, ductile iron, seal coated in compliance to the AWWA Specifications latest designation specifications.

C Construction
Connect to Existing Water Main/Valve(s) shall be performed at the locations shown on the plans. This item of work shall include the excavation and exposing of the existing water main at the location of connection to determine the exact location and elevation of the existing pipe, the coordination with local water utility personnel for the temporary shutdown of the existing water main, the notification of all the affected businesses and residences of the time and approximate duration of the shutdown, and all fittings required for the connection of new water main to the existing water main. All connections performed, shall be inspected the engineer prior to backfill.

Open ends of pipe shall be closed during non-working periods by a watertight plug or other means approved by the engineer. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Cutting pipe shall be done in a neat and workmanlike manner without causing damage to the pipe. The cut edges shall be beveled so as not to cause damage to the gasket when inserted into a fitting.

Water main connection material shall be provided with straps for electrical connectivity requirements.

D Measurement
The department will measure Connect to Existing (size) Water Main / Valve as each individual connection, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.36	Connect To Existing 16 Inch Water Main / Valve	Each
SPV.0060.37	Connect To Existing 12 Inch Water Main	Each
SPV.0060.38	Connect To Existing 8 Inch Water Main	Each
SPV.0060.39	Connect To Existing 6 Inch Water Main	Each

Payment is full compensation for furnishing all work including preparation of the terminal end of existing main for connection, transition fittings or reducer, conductivity, straps, and mechanical joint restraint, and all labor, equipment, and materials associated with completing the connection.

49. Line Stop 16 Inch, SPV.0060.40.

A Description
This item of work consists of furnishing and installing all items necessary to stop flow in a water main of the size, at location shown on plans, and as hereinafter provided.

B Materials
Work and materials under this item shall be according to the Standard Specifications for Water Main Construction, City of La Crosse, Wisconsin, (City Specifications revised January 1993).

Fittings: All fittings shall be if epoxy coated carbon steel that complies with the AWWA Specifications latest designation specifications

C Construction
Line Stops shall be installed in existing water mains at the locations shown on the plans. The exact location of the line stop shall be determined in the field with the engineer. This item of work shall include the excavation and exposing of the existing water main at the location of the line stop, cleaning the exterior of the water main and interior of fittings, and disinfecting the surfaces before cutting into the water main. The water utility staff shall be contacted before installing the line stop and informed of all the businesses and residences that may be affected if the water main needs to be shut down. All work shall be inspected by the engineer.

At the completion of the line stop, the fittings inside the water main shall be removed and access sealed and verified water tight.

Cutting pipe shall be done in a neat and workmanlike manner without causing damage to the pipe. The cut edges shall be beveled so as not to cause damage to the gasket when inserted into a fitting.

D Measurement
The department will measure Line Stop (size) as each individual line stop, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.40	Line Stop - 16 Inch	Each

Payment is full compensation for furnishing all work all work including excavating the existing water main, preparation of the existing water main, furnishing the line stop fitting, cutting the existing water main, inserting and removing the flow stopping unit, copper jumper for continuity, furnishing all labor, equipment, and materials associated with completing the line stop.

50. Reducer – 12 to 8 Inch, SPV.0060.41; Reducer - 12 to 6 Inch, SPV.0060.42; Cross – 12 x 16 Inch, SPV.0060.43; Tee – 12 x 12 Inch, SPV.0060.44; Tee – 12 x 8 Inch, SPV.0060.45; Tee 12 x 6 Inch, SPV.0060.46; 45 Degree Bend – 12 Inch, SPV.0060.47; 45 Degree Bend – 6 Inch, SPV.0060.48.

A Description

This item of work consists of furnishing and installing all compact ductile iron fittings of the size specified to be installed in the water main, at location shown on plans, and as hereinafter provided.

B Materials

Materials under this item shall be according to the Standard Specifications for Water Main Construction, City of La Crosse, Wisconsin, (City Specifications revised January 1993).

Fittings shall ductile iron meeting ASTM C-110 latest designation, 350 psi rated. All reducers, crosses, tees and bends shall be cement lined, seal coated and conform to the AWWA Specifications latest designation specification. Approved manufactures of ductile iron fittings are American Cast Iron Pipe, U.S. Pipe or an approved equal.

C Construction

Reducers, Crosses and Tees shall be installed in new water mains at the locations shown on the plans. The exact location of each fitting shall be determined in the field with the engineer. This item of work shall include cleaning the exterior of the water main and interior of the fitting, and disinfecting before the fitting is placed onto the water main and the mechanical joint and the joint restraints are secured. The exact location shall be set at the time of installation. All work shall be inspected by the engineer and the location of each fitting recorded.

Cutting pipe shall be done in a neat and workmanlike manner without causing damage to the pipe. The cut edges shall be beveled so as not to cause damage to the gasket when inserted into a fitting.

D Measurement

The department will measure Reducer (size), Cross (size), Tee (size) and 45 Degree Bend (size) as each individual fitting, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.41	Reducer - 12 to 8 Inch	Each
SPV.0060.42	Reducer – 12 to 6 Inch	Each
SPV.0060.43	Cross - 12 x 16 Inch	Each
SPV.0060.44	Tee – 12 x 12 Inch	Each
SPV.0060.45	Tee - 12 x 8 Inch	Each

SPV.0060.46	Tee - 12 x 6 Inch	Each
SPV.0060.47	45 Degree Bend – 12 Inch	Each
SPV.0060.48	45 Degree Bend – 6 Inch	Each

Payment is full compensation for furnishing all work including preparation of the terminal end of the main for connection, mechanical joint restraint, bonding strap, and all labor, equipment, and materials associated with completing the connection.

51. Nitrile Gasket 12 Inch, SPV.0060.49; Nitrile Gasket 6 Inch, SPV.0060.50.

A Description
This item of work consists of furnishing and installing nitrile gaskets of the size specified to in the water mains installed in hydrocarbon contaminated soils and as directed by the engineer, and as hereinafter provided.

B Materials
Work and materials under this item shall be according to the Standard Specifications for Water Main Construction, City of La Crosse, Wisconsin, (City Specifications revised January 1993).

Gasket material shall be Nitrile G and shall comply with the AWWA Specifications latest designation specifications.

Approved manufactures of gaskets are American Pipe, Tyton - U.S Pipe, or an approved equal.

C Construction
Nitrile Gaskets shall be used in new water mains installed in soils that are shown to be contaminated or as directed by the engineer. All work shall be inspected by the engineer and the location of each fitting recorded.

D Measurement
The department will measure Nitrile Gasket (size) as each individual gasket, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.49	Nitrile Gasket 12 Inch	Each
SPV.0060.50	Nitrile Gasket 6 Inch	Each

Payment is full compensation for furnishing all work all work including installing the gasket and recording the location of each gasket installed.

52. Manhole – 60 Inch I.D., SPV.0060.51; Manhole – 96 Inch I.D., SPV.0060.52.

A Description

This item of work consists of furnishing and installing all equipment, Labor and materials to remove existing manholes and install new manholes of the size specified on the existing sanitary sewer as directed by the engineer, and as hereinafter provided.

B Materials

Work and materials under this item shall be according to the Standard Specifications for The Construction of Sewers, City of La Crosse, Wisconsin, (City Specifications revised January 1993).

All manholes shall be pre-cast, reinforced concrete structures manufactured in a controlled factory environment. Manholes shall comply with the ASTM standards for pre-cast reinforced concrete manholes, latest designation specifications.

C Construction

Sanitary Sewer Manholes shall replace existing manholes. The existing manholes shall be removed from the top down in a manner that prevents debris from falling into the sanitary sewer. All debris shall be removed from the construction area and disposed of off-site. Manholes shall be supported on a poured-in-place reinforced concrete foundation that will prevent the weight of the structure from resting on the existing sanitary sewer. The space between the existing sewer and the new manhole shall be sealed with a non-shrink grout. An opening, 3 feet in diameter, shall be made in the top of the existing sanitary sewer. All exposed edges shall be finished smooth with non-shrink grout. The manhole shall be installed with outside drops as indicated on the plans. The flow from side street sewers shall be directed to the Cass Street sanitary sewer.

D Measurement

The department will measure Manhole (size) as each individual manhole, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.51	Manhole – 60 Inch I.D.	Each
SPV.0060.52	Manhole – 96 Inch I.D.	Each

Payment is full compensation for furnishing all work including excavating and removing the existing manhole, directing waste water flow to the Cass Street sanitary sewer, placing the concrete foundation, setting the manhole structure, connecting the side street sewers including out-side drops, and backfill and compaction.

53. Water Service Manifold, SPV.0060.53.

A Description

This item of work consists of furnishing and installing all equipment, labor and materials to provide temporary water to 709 Cass Street, 233 – 235 and 223 – 229 South 7th Street. Include all piping and valves between the fire hydrant and the existing services of the size specified and as directed by the engineer, and as hereinafter provided.

B Materials

Work and materials under this item shall be according to the Standard Specifications for The Construction of Sewers, City of La Crosse, Wisconsin, (City Specifications revised January 1993).

Manifold: All manholes shall tamper resistant pipe and fitting, capable of furnishing water to the listed properties.

Service Connections: The size of the services between the manifold and existing service shall match the service size.

C Construction

Water Service Manifold shall furnish temporary water service to the 709 Cass Street, 233 – 335 and 223 – 229, shall provide water to the listed properties while the water main in 7th Street is being installed and tested. The existing water services shall be connected to the manifold using pipe that matches the existing service. The temporary service pipe and manifold shall be disinfected and a safe water sample obtained before connecting the services to the manifold. When the new water main in 7th Street has been accepted, and the new service shall be installed, the temporary water service manifold shall be removed.

D Measurement

The department will measure Water Service Manifold as each individual manifold, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.53	Water Service Manifold	Each

Payment is full compensation for furnishing all work including furnishing the pipe and valves, connecting to the fire hydrant, and excavating to the existing water service.

54. Remove Existing Lighting Control, Item SPV.0060.60.

A Description

This special provision describes removing existing lighting control cabinets, disconnects, meter pedestal and restoring the site to match the surroundings.

B (Vacant)

C Construction
Contact the City of La Crosse at least 7-days prior to removing existing control.

Arrange with the utility for a disconnection of the existing electrical service lateral and removal of the meter housing.

Properly dispose of all related equipment.

D Measurement
The department will measure Remove Existing Lighting Control by the unit acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.60	Remove Existing Lighting Control	EACH

Payment is full compensation for removals, backfill, and disposal as required above.

55. Salvage Street Light Assembly, Item SPV.0060.61.

A Description
This special provision describes salvaging street lighting units from the project as shown in the plans and as hereinafter provided.

B (Vacant)

C Construction
Disconnect and salvage the complete lighting unit from the locations shown in the plans and/or as designated by the engineer.

Carefully stockpile the complete lighting unit on site at a location approved by the engineer. Place all equipment on blocks so as not to be in direct contact with the ground. Salvaged items shall be stored and protected from damage until ready for pick up by the City of La Crosse. Any damage to the salvaged materials resulting from the removal and salvaging operations shall be repaired or replaced in-kind at the contractor's expense. Contact the City of La Crosse Public Works Engineering Department, (608) 789-7505, a minimum of two business days prior to pick up.

This item includes coordination and incidentals necessary to remove or have removed by the City of La Crosse: street name signs and all accessories affixed to the lighting units.

D Measurement
The department will measure Salvage Street Lighting Unit as each individual lighting unit, acceptably salvaged and delivered.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.61	Salvage Street Lighting Unit	EACH

Payment is full compensation for salvaging and storage of all existing lighting unit components.

56. Reinstall Decorative Street Light Assembly, Item SPV.0060.62.

A Description
This special provision describes reinstalling salvaged decorative street lighting units on a new concrete base. Concrete base shall be considered incidental to this item.

B Materials
Use all street lighting materials salvaged from the project except for pole wiring and HPS lamps.

Furnish materials to provide a concrete base with matching size, depth, bolt size, bolt circle and projection. Concrete base materials shall conform to the requirements in standard spec 654.

C Construction
Contact the City of La Crosse Public works Engineering Department 14 days prior to removing the decorative street lights. Contact Matthew Gallager at (608) 789-7392 to coordinate removal and reinstallation of decorative street lighting units.

Reinstall street lights according to the pertinent provisions of standard spec 657 and standard spec 659.

Construct concrete base with matching size, depth, bolt size, bolt circle and projection. Concrete base installation shall conform to the requirements in standard spec 654.

D Measurement
The department will measure Reinstall Decorative Street Lighting Unit by each individual unit, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item.

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.62	Reinstall Decorative Street Lighting Unit	EACH

Payment is full compensation for furnishing and installing HPS lamps, concrete base; and for installing the salvaged pole and luminaire.

57. Decorative Base Type A, Item SPV.0060.63; Decorative Base Type B, Item SPV.0060.64.

Construct Decorative Base (Type) according to standard spec 654 and according to the plan details.

58. Decorative Street Light Assembly Type A, Item SPV.0060.65; Decorative Street Light Assembly Type B, Item SPV.0060.66; Decorative Traffic Signal Assembly Type C, Item SPV.0060.67.

A Description

This work shall be according to the requirements of standard spec 657, the plans, standard detail drawings, and as hereinafter provided.

B Materials

B.1 Decorative Street Light Assembly Type A

Furnish Decorative Street Light Assembly A as follows:

Sun Valley luminaire arm, luminaire, and 250 watt HPS lamp

- LCL – III – 250 HPS 120 – XPY – RAL-9005-T

Sun Valley pole

- 16 flutes tapered steel shaft, shaft has 7.00" butt, tapering to 3.9" top, minimum yield strength 55,000 P.S.I. (no hand hole provided)
- Accessories: RBA – DUP GFI

Sun Valley clamshell cover

- 3000SB Split Base

Transformer base according to standard spec 657.2

All exposed components shall be painted black.

B.2 Decorative Street Light Assembly Type B

Furnish Decorative Street Light Assembly B as follows:

Sun Valley luminaire arm, luminaire, and 250 watt HPS lamp

- LCL – V – 250 HPS 120 – XPY – RAL-9005-T

Sun Valley pole

- 16 flutes tapered steel shaft, shaft has 7.00" butt, tapering to 3.9" top, minimum yield strength 55,000 P.S.I. (no hand hole provided)

Sun Valley clamshell cover

- 3000SB Split Base

Transformer base according to standard spec 657.2

All exposed components shall be painted black.

B.3 Decorative Traffic Signal Assembly Type C
Furnish Decorative Traffic Signal Assembly C as follows:

- The pole, trombone arm, and transformer base according to standard spec 657.2
- Refer to SDD Pole Mountings for Traffic Signals Type 2
- All components to be painted black.

C Construction
According to the plans and standard spec 657 and manufacturer requirements.

D Measurement
The department will measure Decorative Street Light Assembly [TYPE] and Decorative Traffic Signal Assembly Type C as each individual installation, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.65	Decorative Street Light Assembly Type A	EACH
SPV.0060.66	Decorative Street Light Assembly Type B	EACH
SPV.0060.67	Decorative Traffic Signal Assembly Type C	EACH

Payment is full compensation for furnishing and installing the Decorative Street Light Assembly [TYPE] and Decorative Traffic Signal Assembly Type C as described above.

59. Perennials, Feather Reed Grass (Karl Foerster), CG 1 Gal., Item SPV.0060.68; Perennials, Prairie Dropseed, CG, 1 Gal., Item SPV.0060.69.

A Description
This special provision describes furnishing and installing Perennial Plants at the locations shown on the plans and according to the requirements of standard spec 632, the plans, and as hereinafter provided.

B Materials
Provide Perennial Plants, as shown on plan, and complying with American Standard for Nursery Stock (ANSI Z60.1-2004) for type, shape, and height.

Plant Materials
All plants shall be grown within the states of Wisconsin, Minnesota, Michigan, or parts of northern Illinois, Indiana or Ohio located within Zones 4 and 5 of the "Plant Hardiness Zone Map" produced by the United States Department of Agriculture, Miscellaneous Publication No. 1475, issued January, 1990, unless otherwise approved by the engineer.

A list of sources for plants shall be furnished according to standard spec 632.2.2.8 before planting begins for fall-planted plants and before March 15 for spring-planted plants. All sources will be subject to verification by the engineer.

Provide type B fertilizer.

C Construction
Ensure that Planting Mixture has been placed according to specifications.

Stake out location of plantings for approval by supervising engineer.

Ensure that the bottom of the hole is adequately compacted to guard against settling. Tamp or water in as necessary to create a condition by which plants will not settle in the planting beds. The bottom of the root ball shall be in direct contact with the bottom of the hole.

Install Perennial Plants and mulching as shown on the plan and as per the standard specifications.

D Measurement
The department will measure Perennials (Type) by each unit, acceptably complete in place.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.68	Perennials, Feather Reed Grass (Karl Foerster), CG, 1 Gal.	Each
SPV.0060.69	Perennials, Prairie Dropseed, CG, 1 Gal.	Each

Payment for Perennials bid item are full compensation for providing, transporting, handling, storing, pruning, placing, and replacing plant materials; for excavating all plant holes, salvaging topsoil, mixing, and backfilling; for providing and applying all required fertilizer, mulch, water, rodent protection, herbicides and anti-desiccant spray; and for disposing of all excess and waste materials.

60. Concrete Curb & Gutter Integral 24-Inch Type D, Item SPV.0090.01; Concrete Curb & Gutter HES Integral 24-Inch Type D, Item SPV.0090.02; Concrete Curb & Gutter 24-Inch Type A, Item SPV.0090.03; Concrete Curb & Gutter 30-Inch Type A Full Depth, Item SPV.0090.04.

Construct the Concrete Curb & Gutter Integral 24-Inch Type D, Concrete Curb & Gutter HES Integral 24-Inch Type D, Concrete Curb & Gutter 24-Inch Type A, and Concrete Curb & Gutter 30-Inch Type A Full Depth according to standard spec 601 and according to the plan details. Furnish high early strength concrete under the HES bid items.

61. Salvaged Decorative Fence, Item SPV.0090.05.

A Description
This special provision describes salvaging and reinstalling decorative metal fence as shown in the plans and as hereinafter provided.

B (Vacant)

C Construction
Remove and salvage the metal fence and steel pipe anchors from the location shown in the plans.

Carefully store the fence and steel pipe anchors at a location approved by the engineer until the fence can be reinstalled at the new location. Any damage to the fence and pipe anchors resulting from the removal and salvaging operations shall be repaired or replaced in-kind at the contractor's expense.

Reinstall the steel pipe anchors and metal fence at the locations shown in the plans. Field verify height of the metal fence above the existing ground and reinstall at the same height above the ground at the new location. Reinstall the steel pipe anchors above the ground at the same height as existing conditions.

D Measurement
The department will measure Salvaged Decorative Fence in length by the linear foot, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.05	Salvaged Decorative Fence	LF

Payment is full compensation for salvaging, hauling, storing, and reinstalling the existing metal decorative fence and steel pipe anchors; for excavating and backfilling; and for removing and disposing of surplus material.

62. Storm Sewer Pipe PVC 6-Inch, Item SPV.0090.06; Storm Sewer Pipe PVC 12-Inch, Item SPV.0090.07.

A Description
This special provision describes furnishing and installing PVC pipe as shown in the plans and as hereinafter provided.

B Materials
Field verify pipe size before ordering and furnishing pipe. Furnish poly vinyl chloride pipe schedule 40 conforming to ASTM D1785 or ASTM D2665.

Furnish poly vinyl chloride pipe solvent and cleaner application conforming to ASTM D2855.

C Construction
Lay and maintain all pipes to the lines and grades shown in the plans.

Before lowering pipe into the trench and while suspended, inspect the pipe for defects. Reject and remove any defective, damaged, or unsound pipe.

Fit and match pipes so when laid they will form a sewer with a smooth and uniform invert.

Securely connect new PVC pipe to existing pipe using solvent-cement joints. A flexible coupling with stainless steel clamps can be used for connecting the new PVC pipe to the existing pipe if approved by the engineer.

Backfill trenches according to standard spec 607.3.5.

D Measurement
The department will measure Storm Sewer Pipe PVC (size) in length by the linear foot, acceptably completed. This measurement equals the distance along the centerline of the pipe installed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.06	Storm Sewer Pipe PVC 6-Inch	LF
SPV.0090.07	Storm Sewer Pipe PVC 12-Inch	LF

Payment is full compensation conforming to standard spec 608.5 for Storm Sewer Pipe Reinforced Concrete.

63. Copper Water Service 1-Inch, Item SPV.0090.20; Copper Water Service 1-¼ Inch, Item SPV 0090.21; Copper Water Service 1-½ Inch, Item SPV.0090.22.

A Description
This work consists of excavating required trenches, removing existing water lateral, furnishing and laying new type K water lateral service pipe of the size and class specified, connecting the new water service to existing water service, furnishing and installing all fittings, flushing the lateral, pressure testing and continuity testing, back filling trenches and restoring the site of work, according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main materials shall conform to the AWWA Specifications latest designation specifications. Copper water service pipe shall be Type “K” seamless soft copper.

C Construction
Copper Water Service to be installed according to City of La Crosse Standard Specifications. The exact location shall be set at the time of installation.

D Measurement
The department will measure Copper Water Service (size) in length by the linear foot, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.20	Copper Water Service 1 - Inch	LF
SPV.0090.21	Copper Water Service 1 - 1/4 Inch	LF
SPV.0090.22	Copper Water Service 1 - 1/2 Inch	LF

Payment is full compensation for furnishing all work including furnishing all materials, including all fittings, and couplings, for furnishing all excavation, laying lateral, removing old lateral, and making all connections; for testing and disinfecting; and for back filling, cleaning out and restoring site of work.

64. Ductile Iron Water Service 4-Inch, SPV.0090.23.

A Description
This work consists of excavating required trenches, removing existing water lateral, furnishing and laying ductile iron water lateral of the size and class specified, connecting the new water service to existing water service, furnishing and installing all fittings, flushing the lateral, pressure testing and continuity testing, back filling trenches and restoring the site of work, according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water service materials shall conform to the AWWA Specifications latest designation specifications.

B.1 Pipe
Pipe shall be cement lined ductile iron pressure class 350 (350 psi) meeting ASTM C-104 latest designation, with minimum wall thickness of 0.25". Pipe gaskets shall meet ASTM C-111. Approved manufactures of ductile iron water main are American Cast Iron Pipe, U.S. Pipe or an approved equal.

B.2 Pipe Joints
Pipe joints shall be mechanical joint for all fittings and where straight pipe connects to fittings. Pipe joints may be push-on type (slip joint) on straight lengths of pipe.

New gaskets shall be provided at all joints within the replaced water main section. All gaskets shall conform to AWWA specifications and shall have the same pressure rating as the pipe or fitting of which they are a part.

Mechanical joint restraint shall be installed at all bends, plugs, wyes, tees, and included in the cost bid for pipe installation.

B.3 Poly Wrap
Poly-Wrap (polyethylene encasement) shall be 8 mil thickness and meet ASTM C-105, latest designation and shall be installed to all permanently installed water main.

B.4 Joint Restraint
Joint restraints shall be Meg A Lug wedge action type joint restraints manufactured by EBBA Iron Sales or an approved equal.

C Construction
Ductile Iron Water Service shall be installed according to City of La Crosse Standard Specifications. The exact location shall be set at the time of installation.

D Measurement
The department will measure Ductile Iron Water Service (size) in length by the linear foot, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.23	Ductile Iron Water Service 4-Inch	LF

Payment is full compensation for furnishing all work including furnishing all materials, including all fittings, couplings and poly wrap, for furnishing all excavation, laying lateral, removing old lateral, and making connections to new or existing fixtures; for testing and disinfecting; and for back filling, cleaning out and restoring site of work.

65. Ductile Iron Water Main 16 Inch, Item SPV.0090.24; Ductile Iron Water Main 12 Inch, Item SPV.0090.25; Ductile Iron Water Main 8 Inch, Item SPV.0090.26; Ductile Iron Water Main 6 Inch, Item SPV.0090.27.

A Description
This work consists of excavating required trenches, removing existing water main, furnishing and laying ductile iron water main of the size and class specified, polyethylene wrap, disinfecting chemical, flushing the main, pressure testing and continuity testing, back filling trenches and restoring the site of work, according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials
All water main work and materials shall conform to the AWWA Specifications latest designation specifications.

These standards for work and materials are also supplemented according to with the Standard Specifications for Water Main Construction, City of La Crosse, Wisconsin. The city specifications are available from the La Crosse City Engineer's Office, 400 La Crosse Street, La Crosse WI 54601, (608) 789-7505.

B.1 Pipe
Pipe shall be cement lined ductile iron pressure class 350 (350 psi) meeting ASTM C-104 latest designation, with minimum wall thickness of 0.25". Pipe gaskets shall meet ASTM C-111. Approved manufactures of ductile iron water main are American Cast Iron Pipe, U.S. Pipe or an approved equal.

B.2 Pipe Joints and Gaskets
Pipe joints shall be mechanical joint for all fittings and where straight pipe connects to fittings. Pipe joints may be push-on type (slip joint) on straight lengths of pipe.

New gaskets shall be provided at all joints within the replaced water main section. All gaskets shall conform to AWWA specifications and shall have the same pressure rating as the pipe or fitting of which they are a part. Nitrile gaskets to be used in contaminated areas.

B.3 Poly Wrap
Poly-Wrap (polyethylene encasement) shall be 8 mil thickness and meet ASTM C-105, latest designation and shall be installed to all permanently installed water main.

B.4 Pipe Restraint
Pipe restraint shall be Meg A Lug wedge action type joint restraints manufactured by Ebba Iron Sales, or an owner approved equal.

C Construction
Ductile Iron Water Main shall be installed according to City of La Crosse Standard Specifications. Comply with all applicable local, state and federal regulations.

Open ends of pipe shall be closed during non-working periods by a watertight plug or other means approved by the engineer. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Cutting pipe shall be done in a neat and workmanlike manner without causing damage to the pipe. The cut edges shall be beveled so as not to cause damage to the gasket when inserted into a fitting.

Mechanical joint restraint shall be installed at all bends, plugs, wyes, tees, and included in the cost bid for pipe installation.

Whenever any work is to be done in connection with the present system of mains, the contractor shall give notice to the engineer and City of La Crosse Water Utility a minimum of one day in advance of the time he expects to begin work, of the time that will be required, and of the place where he expects to do said work. The water utility will close such valves as would be required to shut off the water from the place designated and the contractor must prosecute the work with such diligence and dispatch that the water will be off for the least possible time. The contractor shall have as much as possible of the relocation section pre-assembled prior to shutting off the water and cutting into the existing water main. The contractor shall provide assistance to the Water Utility in the notification of all properties affected by the shutoff.

The exact location shall be set at the time of installation.

D Measurement

The department will measure Ductile Iron Water Main (size) in length by the linear foot, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.24	Ductile Iron Water Main 16 Inch	LF
SPV.0090.25	Ductile Iron Water Main 12 Inch	LF
SPV.0090.26	Ductile Iron Water Main 8 Inch	LF
SPV.0090.27	Ductile Iron Water Main 6 Inch	LF

Payment is full compensation for furnishing all materials for furnishing all excavation, sheeting and shoring, dewatering, if necessary, forming foundation, laying pipe, removing old pipe, sealing joints, and making connections to new or existing fixtures; for testing and disinfecting; for furnishing granular backfill material; and for backfilling, removing sheeting, cleaning out and restoring site of work.

66. Ductile Iron Hydrant Lead 6 Inch, Item SPV.0090.28.

A Description

This work consists of excavating required trenches, removing existing hydrant lead, furnishing and laying ductile iron hydrant lead of the size and class specified, furnishing and installing all joint restraints, polyethylene wrap, disinfecting chemical, flushing the lead, pressure testing and continuity testing, back filling trenches and restoring the site of work, according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials

All water main work and materials shall conform to the AWWA Specifications latest designation specifications.

These standards for work and materials are also supplemented according to with the Standard Specifications for Water Main Construction, City of La Crosse, Wisconsin. The city specifications are available from the La Crosse City Engineer's Office, 400 La Crosse Street, La Crosse WI 54601, (608) 789-7505.

B.1 Pipe
Pipe shall be cement lined ductile iron pressure class 350 (350 psi) meeting ASTM C-104 latest designation, with minimum wall thickness of 0.25". Pipe gaskets shall meet ASTM C-111. Approved manufactures of ductile iron water main are American Cast Iron Pipe, U.S. Pipe or an approved equal.

B.2 Pipe Joints
Pipe joints shall be mechanical joint for all fittings and where straight pipe connects to fittings. Pipe joints may be push-on type (slip joint) on straight lengths of pipe.

New gaskets shall be provided at all joints within the replaced water main section. All gaskets shall conform to AWWA specifications and shall have the same pressure rating as the pipe or fitting of which they are a part. Nitrile gaskets to be used in contaminated areas.

Mechanical joint restraint shall be installed at all bends, plugs, wyes, tees, and included in the cost bid for pipe installation. Joint restraints shall be Meg A Lug wedge action type joint restraints manufactured by EBBA Iron Sales or an approved equal.

B.3 Poly Wrap
Poly-Wrap (polyethylene encasement) shall be 8 mil thickness and meet ASTM C-105, latest designation and shall be installed to all permanently installed water main.

B.4 Pipe Restraint
Pipe restraint shall be Meg A Lug wedge action type joint restraints manufactured by Ebba Iron Sales, or an owner approved equal.

C Construction
Hydrant Lead shall be installed according to City of La Crosse Standard Specifications. Comply with all applicable local, state and federal regulations.

D Measurement
The department will measure Ductile Iron Hydrant Lead (size) in length by the linear foot, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.28	Ductile Iron Hydrant Lead 6 Inch	LF

Payment is full compensation for furnishing all materials, including all fittings, for furnishing all excavation, sheeting and shoring, dewatering if necessary; forming foundation, laying pipe, removing old pipe, sealing joints, and making connections, for testing and disinfecting; for furnishing granular backfill material; and for backfilling, removing sheeting, cleaning out and restoring site of work.

67. Sanitary Sewer 12 Inch, Item SPV.0090.29; Sanitary Sewer 15 Inch, Item SPV.0090.30; Sanitary Sewer 18 Inch, Item SPV.0090.31; Sanitary Sewer 20 Inch, Item SPV.0090.32.

A Description

This work consists of excavating required trenches, removing existing sanitary sewer main, furnishing and laying PVC sanitary sewer main of the size and class specified, leak testing, back filling trenches and restoring the site of work, according to the requirements of the plans, the Standard Specifications and the City of La Crosse Standard Specifications for the Construction of Sewer.

B Materials

All water main work and materials shall conform to the ASTM Specifications latest designation specifications.

These standards for work and materials are also supplemented according to with the Standard Specifications for Sewer Construction, City of La Crosse, Wisconsin. The city specifications are available from the La Crosse City Engineer's Office, 400 La Crosse Street, La Crosse WI 54601, (608) 789-7505.

B.1 Pipe

Pipe shall be SDR 35 PVC meeting ASTM D3034 for pipe between 4" and 15" and ASTM PS46 for pipe between 18" and 36", latest designation. The PVC material shall be made from PVC resin compounded to meet the physical and mechanical properties that meet or exceed cell class 12454 or 12364 as defined in ASTM D1784.

Approved manufactures of PVC sanitary sewer main are JM Eagle, North American, or an approved equal.

B.2 Pipe Fittings

Fittings installed in-line with sewer pipe shall be compatible with SDR 35 PVC sewer pipe and shall meet ASTM D3034 standards for pipe fittings, latest designation. The PVC material shall be made from PVC resin compounded to meet the physical and mechanical properties that meet or exceed cell class 12454 or 12364 as defined in ASTM D1784. Approved manufactures of PVC sanitary sewer fittings are JM Eagle, North American, or an approved

C Construction

Construct sanitary sewer according to City of La Crosse Standard Specifications. Utilize trench boxes, temporary shoring, and other means as necessary to provide a safe working condition.

Open ends of pipe shall be closed during non-working periods by a watertight plug or other means approved by the engineer. If water is in the trench, the seal shall remain in place until the trench is pumped completely dry.

Cutting pipe shall be done in a neat and workmanlike manner without causing damage to the pipe. The cut edges shall be beveled so as not to cause damage to the gasket when inserted into a fitting.

The flow of sewerage shall be either pumped around the new manhole, or the flow blocked to allow the sewer main to be installed under dry conditions. The possibility of back-up shall be considered when blocking the flow of sewerage. The contractor shall give notice to the engineer and City of La Crosse Waste Water Utility a minimum of one day in advance of the time he expects to begin work, of the time that will be required, and of the place where he expects to do said work.

D Measurement
The department will measure Sanitary Sewer (size) in length by the linear foot, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item(s):

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.29	Sanitary Sewer 12 Inch	LF
SPV.0090.30	Sanitary Sewer 15 Inch	LF
SPV.0090.31	Sanitary Sewer 18 Inch	LF
SPV.0090.32	Sanitary Sewer 20 Inch	LF

Payment is full compensation for furnishing all materials, including all fittings, and couplings, for furnishing all excavation, sheeting and shoring, dewatering, if necessary, forming foundation, laying pipe, removing old pipe, sealing joints, and making connections to new or existing fixtures; for testing and disinfecting; for furnishing granular backfill material; and for backfilling, removing sheeting, cleaning out and restoring site of work.

68. Fiber Optic Tracer Cable, Item SPV.0090.60.

A Description
This special provision describes furnishing and installing tracer cable in empty conduit lengths and in all conduit containing fiber optic cable/.

B Materials
Provide the tracer cable with a black insulation cover, No. 12 AWG, XLP, USE rated, 600 VAC, single conductor, copper wire.

C Construction
Install the tracer cable in empty conduit lengths and in all conduit containing fiber optic cable, running continuously through all pull boxes. Install the tracer cable to each control cabinet, but do not enter the cabinet. The tracer cable may be spliced only in pull boxes. Make splices only between full rolls of wire. For the cable splice use a Western Union Splice soldered with resin core flux. All exposed surfaces of the solder shall be smooth. Solder splices using a soldering iron. Cover the splice with a WCSMW 30/100 heat shrink tube, minimum length 4-inches, and with a minimum one-inch coverage over the XLP insulation, underwater grade.

D Measurement
The department will measure Fiber Optic Tracer Cable in length by the linear foot of cable, measured along the centerline of the conduit.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.60	Fiber Optic Tracer Cable	LF

Payment is full compensation for furnishing and installing the tracer cable; splicing; and properly disposing of surplus materials.

69. Fiber Optic Warning Tape, Item SPV.0090.61.

A Description
This special provision describes furnishing and installing fiber optic warning tape above all conduit containing fiber optic cable.

B Materials
Provide underground warning mesh that is constructed of polypropylene and is fluorescent orange in color. Provide 6-inch detectable marking tape that has the words "Buried Fiber Optic Cable" and is orange in color.

C Construction
Lay underground warning mesh above all underground conduits, 12-inches below grade. The width of the warning mesh shall be the same as the width of the trench. Lay directly above the underground warning mesh, a 6-inch detectable marking tape that has the words "Buried Fiber Optic Cable" and is orange in color.

D Measurement
The department will measure Fiber Optic Warning Tape in length by the linear foot of tape, measured along the centerline of the conduit.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.61	Fiber Optic Warning Tape	LF

Payment is full compensation for furnishing and installing the marking tape; and properly disposing of surplus materials.

70. Fiber Optic Cable Outdoor Plant 12-CT, Item SPV.0090.62.

A Description

This special provision describes furnishing and installing fiber optic cable 12-countt suitable for outdoor installation.

B Materials

Provide single-mode 12-count fiber optic cable suitable for outdoor installation. Fiber optic cable should have a polyethylene outer jacket and a dielectric central element and ripcord.

B.1 Fiber Characteristics

All fibers in the cable must be usable fibers and meet required specifications. Each optical fiber shall consist of a doped silica core surrounded by a concentric silica cladding. The fiber shall be matched clad design.

	Single Mode
Cladding Diameter:	125.0 ± 1.0 mm.
Core-to-Cladding Offset:	<0.8 mm.
Cladding Non-Circularity:	<1.0%
Coating Diameter:	245 ±10 mm.
Colored Fiber Diameter:	nominal 250 mm.
Attenuation Uniformity:	No point discontinuity greater than 0.10 dB at either1310 nm or 1550 nm.
Attenuation at the Water Peak:	The attenuation at 1383 at 3 nm shall not exceed 2.1 dB/km.
Cutoff Wavelength:	<1260 nm
Mode-Field Diameter:	9/30 ± 0.50 mm at 1310 nm, 10.50 ± 1.00 mm at 1550 nm.

The coating shall be a dual layered, UV-cured acrylate applied by the fiber manufacturer, and shall be mechanically strippable.

B.2 Fiber Parameters

Fiber Type: Single Mode
Required Fiber Grade – Maximum Individual Fiber Attenuation

The maximum dispersion shall be <3.2 ps/(nm ×km) from1285 nm to 1330 nm and shall be <18ps/(nm×km) at 1550 nm.

The fiber manufacturer shall proof-test 100% of the optical fiber to a minimum load of 100 kpsi.

B.3 Fiber Construction

Optical fibers shall be placed inside a loose buffer tube. Each buffer tube shall contain up to 12 fibers. The fibers shall not adhere to the inside of the buffer tube.

Each fiber shall be distinguishable by means of color coding according to the TIA/EIA-298 Specifications, "Optical Fiber Cable Color Coding." Buffer tubes containing fibers shall be color-coded with distinct and recognizable colors according to the above references specification.

In buffer tubes containing multiple fibers, the colors shall be stable across the specified storage and operating temperature range and not subject to fading or smearing onto each other or into the gel filling material. Colors shall not cause fibers to stick together.

Buffer tubes shall be kink resistant within the specified minimum bend radius.

Fillers may be included in the cable core to lend symmetry to the cable cross-section where needed.

The central anti-buckling member shall consist of a glass reinforced plastic rod. The purpose of the central member is to prevent buckling of the cable.

Each buffer tube shall be filled with a non-hygroscopic, non-nutritive to fungus, electrically non-conductive, homogenous gel. The gel shall be free from dirt and foreign matter. The gel shall be readily removable with conventional nontoxic solvents. Buffer tubes shall be stranded around a central member using the reverse oscillation, or "S-Z", stranding process.

The cable core shall contain a water-blocking material. The water blocking material shall be non-nutritive to fungus, electrically non-conductive and homogenous. It shall also be free from dirt and foreign matter and shall be readily removable with conventional (nontoxic) solvents.

Binders shall be applied with sufficient tension to secure the buffer tubes to the central member without crushing the buffer tubes. The binders shall be non-hygroscopic, non-wicking and dielectric with low shrinkage. The cable shall contain at least one ripcord under the sheath for easy sheath removal. Tensile strength shall be provided by a combination of high tensile strength dielectric yarns. The high tensile strength dielectric yarns shall be helically stranded evenly around the cable core.

All-dielectric cables (with no armoring) shall be sheathed with medium density polyethylene (MDPE). The minimum nominal jacket thickness shall be 1.4 mm Jacketing material shall be applied directly over the tensile strength members and water blocking material. The polyethylene shall contain carbon black to provide ultraviolet light protection and shall not promote the growth of fungus.

The jacket or sheath shall be free of holes, splits, and blisters. The cable jacket shall contain no metal elements and shall be of a consistent thickness. Cable jackets shall be marked with manufacturer's name, sequential foot markings, year of manufacture, and a telecommunication handset symbol, as required by Section 350G of the National Electrical Safety Code (NESC). The actual length of the cable shall be within –0/+1% of the length markings. The marking shall be in contrasting color to the cable jacket. The height of the marking shall be approximately 2.5 mm.

The maximum pulling tension shall be 2700 N (608 lbf) during installation (short term) and 890 N (200 lbf) long term installed.

The shipping, storage, and operating temperature range of the cable shall be 40° C to +70° C. The installation temperature range of the cable shall be –30° C to +70° C.

When tested according to FOTP-3, "Procedure to Measure Temperature Cycling Effects on Optical Fibers, Optical Cable, and Other Passive Fiber Optic Components," the average change in attenuation at extreme operational temperatures (-40° C to +70° C) shall not exceed 0.05 dB/km at 1550 nm for single-mode fiber. The magnitude of the maximum attenuation change of each individual fiber shall not be greater than 0.15 dB/km at 1550 nm.

B.4 General Cable Performance Specifications

When a one-meter static head or equivalent continuous pressure is applied at one end of a one meter length of unaged cable for 24 hours, no water shall leak through the open cable end. When a one-meter length of aged cable for one hour, no water shall leak through the open cable end. The aging cycle is defined as exposing the cable to +85° $\pm$2° C for 168 hours and two cycles of –40° C to +70° C with cable held at these temperatures for 24 hours. At the end of this cycle, the cable will be decreased to +23° C and held for 24 hours. The water penetration test is completed at the end of the 24-hour hold. Testing shall be performed according to the industry standard test, FOTP-82, "Fluid Penetration Test for Fluid-Blocked Fiber Optic Cable."

When tested according to FOTP-81, "Compound Flow (Drip) Test for Filled Fiber Optic Cable", the cable shall exhibit no flow (drip or leak) of filling and/or flooding material at +65° C.

The cable shall withstand a minimum compressive load of 440N/cm (250 lbf/in) for armored cables and 220 N/cm (125 lbf/in) for non-armored cables applied uniformly over the length of the compression plate. The cable shall be tested according to FOTP-41, "Compressive Loading Resistance of Fiber Optic Cables," except that the load shall be applied at the rate of 3 mm to 20 mm per minute and maintained for ten minutes. The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the

measurement system is typically 0.05 dB or less. No fibers shall exhibit a measurable change in attenuation after load removal.

When tested according to FOTP-104, "Fiber Optic Cable Cyclic Flexing Test," the cable shall withstand 25 mechanical flexing cycles at a rate of 30 cycles per minute around a sheave diameter not greater than 20 times the cable diameter. The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. No fibers shall exhibit a measurable change in attenuation after load removal.

When tested according to FOTP-25, "Repeated Impact Testing of Fiber Optic Cables and Cable Assemblies," the cable shall withstand 25 impact cycles. The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. The cable jacket shall not exhibit evidence of cracking or splitting at the completion of the test.

When tested according to FOTP-33, "Fiber Optic Cable Tensile Loading and Bending Test," using a maximum mandrel and sheave diameter of 560 mm, the cable shall withstand a tensile load of 2700 N (608 lbf) applied for one hour (using "Test Condition II" of the procedure). In addition, the cable sample, while subjected to a minimum load of 2660 N (600 lbf), shall be able to withstand a twist of 360 degrees in a length of less than 3 meters (9.9 feet). The magnitude of the attenuation change shall be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers shall not experience an attenuation change greater than 0.1 dB at 1550 nm (SM). The repeatability of the measurement system is typically 0.05 dB or less. The cable shall not experience a measurable increase in attenuation when subjected to the rated residual tensile load, 890 N (200 lbf).

When tested according to FOTP-85, "Fiber Optic Cable Twist Test," a length of cable no greater than 2 meters will withstand 10 cycles of mechanical twisting. The magnitude of the attenuation change will be within the repeatability of the measurement system for 90% of the test fibers. The remaining 10% of the fibers will not experience an attenuation change greater than 0.1 dB at 1550 nm. The repeatability of the measurement system is typically 0.05 dB or less. The average increase in attenuation for the fibers shall be <0.40 dB at 1300 nm. The cable jacket will exhibit no cracking or splitting when observed under 5X magnification after completion of the test.

When tested according to FOTP-181, "Lightning Damage Susceptibility Test for Optic Cables with Metallic Components," the cable shall withstand a simulated lightning strike with a peak value of the current pulse equal to 105 kA. A damped oscillatory test current shall be used with a maximum frequency of 30 kHz. The time to half-value of the waveform envelope shall be from 40 70 ms.

B.5 Quality Assurance Provision
All cabled optical fibers >1000 meters in length shall be 100% attenuation tested. The attenuation of each fiber shall be provided with each cable reel. The cable manufacturer shall be ISO 9001 registered. The cable manufacturer shall provide installation procedures and technical support concerning the items contained in this specification. The manufacturer shall certify that the supplied cable meets all requirements of these specifications.

B.6 Packaging
The completed cable shall be packaged for shipment on non-returnable wooden reels. Top and bottom ends of the cable shall be available for testing. Both ends of the cable shall be sealed to prevent the ingress of moisture. Each reel shall have a weatherproof reel tag attached identifying the reel and cable.

A cable data sheet shall accompany each cable. The following information shall be included:

Cable Number
Factory Order Number
Customer Purchase Order Number
Measured Attenuation of Each Fiber (for lengths>1000 m)
Ordered Length
Actual Shipped Length

C Construction
Install fiber optic cable according to the pertinent provisions of standard specification standard spec 678.

D Measurement
The department will measure Fiber Optic Cable Outdoor Plant 12-CT in length by the linear foot, measured along the centerline of the conduit.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.62	Fiber Optic Cable Outdoor Plant 12-CT	LF

Payment is full compensation for furnishing, installing, and testing the cable.

71. Furnish and Install Equivalent Lighting Conductors, Item SPV.0090.63.

A Description
This special provision describes furnishing and installing electrical conductors to match existing street lighting circuits.

B Materials
Furnish electrical conductors equivalent to conductors in existing lighting circuits and incidentals according to the pertinent requirements of standard spec 655.2. Furnish various sizes/types of electrical conductors to match all existing systems within the project limits. All sizes and types of electrical conductors shall be paid under this bid item.

C Construction
Perform a pre-construction site assessment with the City of La Crosse and the engineer for all areas where this item is used. The site assessment shall include written documentation of existing service points, circuiting patterns, number of conductors and the conductor size/type.

This item includes the removal and abandonment of any existing conductors which preclude the ability to run new conductors in existing conduit.

Install electrical conductors according to the pertinent requirements of standard spec 655.3.

D Measurement
The department will measure Furnish and Install Equivalent Lighting Conductors in length by the linear foot of tape, measured along the centerline of the conduit multiplied by the number of conductors used.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.63	Furnish and Install Equivalent Lighting Conductors	LF

Payment is full compensation for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

72. Concrete Pavement Joint Layout, Item SPV.0105.01.

A Description
This special provision describes providing a concrete pavement or concrete base joint layout design for intersections and marking the location of all joints in the field.

B (Vacant)

C Construction
Plan and locate all points necessary to establish the horizontal position of the transverse and longitudinal joints in the concrete to prevent uncontrolled cracking. Submit a joint layout design to the engineer before paving each intersection. Mark the location of all concrete joints in the field. Follow the plan details for joints in concrete making adjustments as required to fit field conditions.

D Measurement
The department will measure Concrete Pavement Joint Layout as a single lump sum unit for all joint layout designs and marking, acceptably completed under the contract.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Concrete Pavement Joint Layout	LS

Payment is full compensation for providing the intersection joint layout designs and marking all joints in the field.

The department will adjust pay for crack repairs as specified in standard spec 415.5.3.

73. Construction Staking Roundabout Sidewalks, Item SPV.0105.02.

A Description
This work consists of staking the horizontal and vertical position of the concrete sidewalks at the Cass Street and 7th Street roundabout as shown in the plans. The limits of the sidewalks to be staked under this item shall be all sidewalks with designated alignment reference lines running along the back of the sidewalks as shown in the plans between Station 108'ALE'+63.29 and Station 56'CSE'+22.00 along Cass Street and between Station 43'SSN'+31.05 and Station 113'BLN'+98.69 along 7th Street.

B (Vacant)

C Construction
Perform Construction Staking Roundabout Sidewalks according to the pertinent provisions of standard spec 650.

D Measurement
The department will measure Construction Staking Roundabout Sidewalks completed according to the contract and accepted, as a single complete unit of work.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.02	Construction Staking Roundabout Sidewalks	LS

Payment is full compensation for Construction Staking Roundabout Sidewalks work necessary to locate and set all construction stakes; and for maintaining, relocating, and resetting construction stakes at the roundabout throughout all project stages.

The department will not make final payment for this bid item until the contractor submits all survey notes and computations used to establish the required lines and grades to the

engineer within 21 days of completing this work. The department will deduct from payments due the contractor for the additional costs specified in standard spec 105.6.

74. Traffic Signal and Communication Systems Integration, Item SPV.0105.60.

A Description

This special provision describes personnel qualifications, contract roles, and construction methods used to perform traffic signal and communication systems work by an Integrator. This special provision also describes salvaging, furnishing and installing fiber optic communications equipment required for integration of the traffic signal and interconnect systems. The Integrator shall verify the existing system and equipment. The Integrator is to perform necessary documentation and testing according to standard spec 670 and 678.

B Materials

Materials shall be according to standard spec 651.2 and 678.2 and as hereinafter provided:

Identify and furnish communications equipment that is not salvaged existing equipment, and facilitate all contractor item approvals and orders for scheduling of installation activities. Communications equipment may be salvaged from existing cabinets scheduled to be removed provided the equipment is in good working order. Furnishing new termination equipment and miscellaneous cabling shall be considered incidental to this item.

C Construction

Construction shall be according to standard spec 670.3 with the exception of the term "ITS" being replaced by "Traffic Signal and Communication Systems", and as hereinafter provided:

Provide an ongoing role as Integrator beginning with the compilation, review and approval of material submittals; through installation, testing, trouble-shooting and final documentation and acceptance of the working traffic signal and communications system and all components. The Integrator role includes participation in progress meetings as required by construction activities.

Identify and document the existing conditions and configuration of all traffic signal and communications system equipment. Provide the engineer and City of La Crosse a summary documentation of the following items prior to any removal or installation work:

- Existing communications equipment by location
- Existing fiber routing and color coding
- Existing signal programming
- Equipment condition and ability for salvage and reuse
- Installation/Reinstallation plan

Provide a management role during the traffic signal cabinet assembly and testing process, prior to field installation. Cabinet assembly is anticipated to include various levels of support provided by the Integrator, municipal electrical staff, the engineer and the contractor. Ensure all equipment is delivered and properly installed within a timely manner. This item also includes programming of both the local and master controller settings. Coordinate all controller programming with the engineer and City of La Crosse.

D Measurement

The department will measure Traffic Signal and Communication Systems Integration as a single lump sum unit for all furnished and installed communication equipment and services, acceptably completed under the contract.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.60	Traffic Signal and Communication Systems Integration	LS

Payment is full compensation for providing existing system verification, specified expertise, assistance, assembly, testing and documentation; payment is also full compensation for furnishing and installing all required communication equipment. The department will pay separately for other traffic signal work under the various bid items in the contract.

75. Remove Traffic Signal STH 16 & 5th Avenue South, Item SPV.0105.61; Remove Traffic Signal STH 16 & 7th Street, Item SPV.0105.62.

A Description

This special provision describes Remove Traffic Signal [LOCATION] according to the pertinent provisions of standard spec 204 and as hereinafter provided. Work under this item also includes transporting or disposing of the existing equipment, including removal of existing electrical service as well as required utility coordination, as directed in this special provision. Removal of pull boxes and concrete bases at the above listed intersections shall be paid for separately.

B (Vacant)

C Construction

Arrange for the de-energizing of the traffic signals and removal of existing electrical service with the local electrical utility after receiving approval from the engineer that the existing traffic signals can be removed.

Notify the City of La Crosse Traffic Engineer at (608) 789-7505 at least five working days prior to the removal of the traffic signals. Complete the removal work as soon as possible following shut down of this equipment.

The city assumes that all equipment is in good condition and in working order prior to the contractor's removal operation. Prior to removal, inspect and provide a list of any damaged or non-working traffic signal equipment to the engineer. Any equipment not identified as damaged or not working, prior to removal, will be replaced by the contractor at no cost to the city.

Carefully disconnect, disassemble, remove and stockpile all traffic signal equipment. Remove all standards and poles per plan from their concrete footings and disassemble out of traffic. Remove the transformer bases from each pole. Remove the signal heads, mast arms, luminaires, wiring/cabling, and traffic signal mounting devices from each signal standard, arm or pole. Ensure that all access hand hole doors and all associated hardware remain intact. Dispose of the underground signal cable, internal wires and street lighting cable off the state right-of-way. Contact the City of La Crosse Public Works Engineering Department, (608) 789-7505, a minimum of two business days prior to pick up.

D Measurement

The department will measure Remove Traffic Signal [Location] as a single lump sum unit of work for each intersection, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.61	Remove Traffic Signal, STH 16 & 5th Avenue South	LS
SPV.0105.62	Remove Traffic Signal, STH 16 & 7th Street	LS

Payment is full compensation for removing, disassembling traffic signals, scrapping of some materials, disposing of scrap material, for delivering the requested materials to the City, and incidentals necessary to complete the contract work.

76. Furnish and Install Traffic Signal Cabinet and Controller STH 16 & 5th Avenue South, Item SPV.0105.63.

A General

This work shall consist of furnishing and installing traffic signal controller(s) and cabinet(s) as shown on the plans and as hereinafter provided.

The controller shall be Eagle Signal Control EPAC M50 Series (Model 3608). The contractor shall submit two copies of the following to the City of La Crosse.

Cable and routing diagrams, pole to pull box wiring diagrams, conductor layout standards and the associated head arrangements and other pertinent details.

Equipment will be examined and tests will be performed to ensure that proper and sufficient equipment is furnished as is required to complete the signal plan operation and sequence in compliance with the intent of the contract specifications. All testing and equipment examination shall be in the presence of the contractor's representative

furnishing the equipment. The contractor's representative will be notified of any needed modifications or corrections to be accomplished by the contractor.

The cabinet shall not be installed until it is in proper working order and approved by City of La Crosse Traffic Engineer. After the contractor has mounted the cabinet on the cabinet foundation, he shall connect all the field wiring inside the controller cabinet and test the signal circuits for correct operation. The contractor shall connect and test the signal circuits outside the controller cabinet as directed by the engineer. Connecting and testing signal circuits shall be considered part of this item of work. The controller shall be a fully traffic actuated, solid state, digital microprocessor controller, capable of providing the number and sequence of phases, overlaps, and any special logic as described herein and shown on the accompanying plan.

The controller shall be fully programmed and shall be mounted in a control cabinet to operate as a complete and functioning intersection traffic signal control system. The equipment items included shall be, but not necessarily limited to, cabinet, microprocessor controller, monitor, detector amplifiers, power supply, power distribution panel, interior cabinet wiring, and other associated electrical and electronic equipment interior to the control cabinet that is necessary to provide the type of operation described in these specifications.

Dual ring, programmable for both single and dual entry concurrent timing, eight-phase frame or equivalent shall be provided. Volume density and pedestrian timing shall be provided for all phases. MUTCD flashing capability shall be provided. All controls shall be according to the accompanying plans and with NEMA TS1 Standards Publication.

The intersection controller unit shall be capable of up to 8-phase operation plus four programmable overlaps regardless of whether preemption, coordination or the special programming is used. The intersection cabinet shall be wired for a minimum of twelve and include twelve 3 circuit load switches.

A.1 Electrical and Operational Aspects

(1) **Buffering.** All logic circuit inputs shall be internally buffered to withstand transients and noise, such as might result from normal usage, without damage to any mechanism components.

(2) **Timing Features.** All controller timing parameters shall be fully programmable from the front panel using switches and/or keyboard inputs, and memory storage features shall be nonvolatile under power off conditions for at least 30 days. The locking, nonlocking detection mode and recall switches shall also be accessible on the front panel.

(3) **Minimum Green Timing.** The passage timer shall time concurrently with the minimum green timer, so that the duration of the minimum green time is directly adjustable and is independent of the passage time setting.

(4) **Manual (Police) Control.** If manual control is used, actuation of the manual control shall permit manual advance of the Walk, Pedestrian Clearance, and Green interval terminations only. Manual termination of Yellow or All Red clearance intervals shall not be permitted.

(5) **Red Revert.** An adjustable red revert control shall be provided to assure adequate red display when recycling a phase during call-away or red rest mode operation. A call for service to a different phase shall be preceded by an all-red clearance interval, as programmed.

(6) **Coordination.** The controller shall be capable of operation in progressive coordination systems and mutual coordination and shall contain, but not be limited to, the following external inputs, with all functions brought out:

Vehicle/Pedestrian Detectors per phase
Internal Maximum Inhibit per ring
Phase Omit per phase - Hold per phase
Semi-Mode per controller- Pedestrian Omit per phase
Maximum II per ring - Red rest per ring
Stop Timing per ring - Force-Off per ring
Select Minimum Recall per controller
Manual Control per controller
Omit Red Clearance per ring - External Start per controller

(7) **Minimum Safe Timings Control.** Controllers shall not accept any operator input or stored timing parameters that would result in intervals shorter than the following: yellow clearance - 3.0 seconds, minimum walk - 4.0 seconds, minimum pedestrian clearance - 6.0 seconds. At the beginning of each of the above intervals, the controller shall check the previously stored data against these minimums. If an operator attempts to load an incorrect timing parameter, the controller unit shall output a unique error code on the front panel display. As an alternate to minimum timing control, a coded keyboard entry security feature may be provided.

(8) **Minimum Safe Timings Control.** Controllers shall not accept any operator input or stored timing parameters that would result in intervals shorter than the following: yellow clearance - 3.0 seconds, minimum walk - 4.0 seconds, minimum pedestrian clearance - 6.0 seconds. At the beginning of each of the above intervals, the controller shall check the previously stored data against these minimums. If an operator attempts to load an incorrect timing parameter, the controller unit shall output a unique error code on the front panel display. As an alternate to minimum timing control, a coded keyboard entry security feature may be provided.

(9) **Indicator Lights and Switches.** Indicator lights shall be provided to show the status of each signal phase on. Indicator lights shall also be used to show interval status, phase termination information, and presence of vehicular and pedestrian calls for each phase. An indicator light shall also be provided to show the status of the backup battery charging circuit. The controller shall have an on off switch and fuse for AC power.

(10) **Data Display**. The data panel shall be a removable hand held unit. The panel shall contain a display panel consisting of LED display characters. The face of the display shall be scratch, chemical, and solvent resistant. In the case of writing data or parameters into the controller there shall be a visual indication that the data has been accepted. The number of characters shall be adequate to read or write all data and parameters in decimal format together with a data descriptor in either alpha numeric format, or thumbwheel switch display. A data key shall be provided.

(11) **Diagnostic Program.** A diagnostic program shall be prepared by the manufacturer of the controller unit which will demonstrate the proper operation of all the inputs, outputs, controls and indicators in the controller, and shall have visual conformation on the front panel. The diagnostic program shall be either resident in the controller or furnished as a separate plug in module. A flow chart and listing of the diagnostic routine shall be furnished with the controller unit.

(12) **Preemption**

(a) **General.** These specifications detail a preemptor program for use with 2 through 8 phase actuated controller. The preemptor shall be capable of being adaptable to meet the various types of applications such as railroad, fire station hard wire, and bridge preempts. The preemptor shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The preemptor shall be completely programmable by the user.

(b) **Preempt Program.**

i. **Preempt Registration.** The preempt call input shall initialize preempt registration and start preempt sequence unless a priority call input is activated which would treat the current controller preemptions state as normal operation and reinitiate call registration.

ii. **Preempt Delay.** As soon as the preempt call is registered the preempt delay will begin timing unless preempt delay is set zero or preempt delay omit was active during preempt call registration. Delay shall be programmable from 0 to 255 seconds minimum. As soon as preempt delay is timed out, current running phases not next to be common in preempt sequence are cleared. If the running phases are green and must be cleared, special programmable values of minimum green, walk and pedestrian intervals will time normal times. Concurrently a special preempt clearance is generated. This clearance is designed for advance track signals and any overlaps that may be green and require yellow clearance.

iii. **Entry Clearance Phase(s) Select.** Two sequential phases or phase pairs shall be available to be run as programmable fixed time intervals as an entry sequence. Two entry options shall be available, each programmable. The entry sequence shall be capable of being omitted entirely.

iv. **Dwell Sequence.** After the entry sequence, the preemptor shall enter the dwell sequence. During the dwell sequence the controller shall cycle between selected phases on a pre-timed or actuated basis. Pedestrian phasing may be normal or omitted entirely. When the dwell sequence is entered, a preempt dwell output shall be generated. The preemptor

shall remain in dwell for the length of the dwell extension timer which shall be capable of being held in reset by the preempt call input. Dwell extension shall be omittable by setting the timer to zero.

v. **Exit Sequence.** After leaving dwell, the controller shall enter one or two programmed exit phases(s) or phase pairs sequences. The sequence will time programmed minimum green and place a vehicle call on all phases not omitted. After timing exit phase minimum green the controller shall time and sequence normally.

(13) **Time Base Coordination.** These specifications detail a Time Base Coordinator program for use with 2 through 8 phase actuated controller. The units shall allow traffic control equipment to be coordinated without requiring the use of interconnection cables. The units shall coordinate traffic control equipment based on signals from a precise time base which will allow output control signals to be changed at the proper pre-programmed time to achieve the coordinated operation of an intersection with other intersections or the desired operation of an isolated intersection. The coordinators may also use a programmer for a master intersection controller which in turn is interconnected with secondary intersection controllers. The units shall also be capable of providing a command for MUTCD flash, and shall allow a full year program to be initiated and carried out without the necessity of field adjustment for anticipated special events, etc. The time base coordinator shall be internal to the controller and shall not alter controller capability or interchangeability under normal operation. The time base coordinator shall be completely programmable by the user.

B Monitoring

A conflict monitor meeting the following requirements shall be provided:

(1) **General.** Each cabinet assembly shall be wired to operate with one Malfunction Management Unit (MMU). The MMU shall be a Type 16. This specification sets forth the minimum requirements for a shelf-mountable, sixteen channel, solid-state Malfunction Management Unit (MMU). The MMU shall meet, as a minimum, all applicable sections of the NEMA Standards Where differences occur, this specification shall govern.

(2) **Monitoring Functions.** The following monitoring functions shall be provided in addition to those required by the NEMA Standard Section 4.

(a) **Dual Indication Monitor.** Dual Indication monitoring shall detect simultaneous input combinations of active Green (Walk), Yellow, or Red (Don't Walk) field signal inputs on the same channel. In Type 12 mode this monitoring function detects simultaneous input combinations of active Green and Yellow, Green and Red, Yellow and Red, Walk and Yellow, or Walk and Red field signal inputs on the same channel. When voltages on two inputs of a vehicle channel are sensed as active for more than 450 msec, the MMU shall enter the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the DUAL INDICATION fault. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. When voltages on two inputs of a vehicle channel are sensed as active for less than 200 msec, the MMU shall not transfer the OUTPUT relay contacts to the Fault position. When operating

with Port 1 communications enabled, Bit #68 (Spare Bit #2) of the Type #129 response frame shall be set to indicate a Dual Indication fault has been detected. Dual Indication Monitoring shall be disabled when the RED ENABLE input is not active.

i. **Dual Indication Programming.** Programming shall be provided to enable the Dual Indication monitoring function for the Green and Red, Green and Yellow, and Yellow and Red combinations for each individual channel. In the Type 12 mode, the Walk inputs shall be logically OR'ed with the Green inputs for purposes of Dual Indication programming.

(b) **Field Check Monitoring.** The Field Check Monitor function shall provide two modes of operation, Field Check Fault and Field Check Status. Field Check Monitoring shall be disabled when the RED ENABLE input is not active.

i. **Field Check Monitor.** In the Field Check Fault mode, when the field signal input states sensed by the MMU do not correspond with the data provided by the Controller Unit in the Type #0 message for 10 consecutive messages, the MMU shall enter the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the FIELD CHECK FAIL fault. Bit #67 (Spare Bit #1) of the Type #129 response frame shall be set to indicate a Field Check fault has been detected. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. 2160-14-70 79 of 112

ii. **Field Check Status.** The Field Check Status mode shall work in combination with the other fault monitoring functions of the MMU. When a Conflict, Red Fail, Clearance Fail, or Dual Indication Fail triggers the MMU, the Channel Status Display and Fault Status Display shall correspond to that detected fault. If Field Check errors were detected while the fault was being timed, the inputs on which the Field Check errors were detected shall be reported on the Channel Status display. Bit #67 (Spare Bit #1) of the Type #129 response frame shall also be set to indicate Field Check errors have been detected.

iii. **Field Check Programming.** Programming shall be provided to enable the Field Check monitoring function for each Green, Yellow, and Red input individually. Programming shall be provided to enable the Field Check monitoring function for channel 2, 4, 6, and 8 Walk input individually when operating in the Type 12 with SDLC mode.

(c) **Recurrent Pulse Monitoring.** The Signal Monitor shall detect Conflict, Red Fail, and Dual Indication faults that result from intermittent or flickering field signal inputs. These recurring pulses shall result in a latching fault with the RECURRENT PULSE STATUS indicated along with the resulting Conflict, Red Fail, or Dual Indication status. An option shall be provided to disable the RP detect function for testing purposes. When operating with Port 1 communications enabled, Bit #69 (Spare Bit #3) of the Type #129 response frame shall be set to indicate a Recurrent Pulse status has been detected.

(d) **External Watchdog Monitoring.** The MMU shall provide the capability to monitor an optional external logic level output from a Controller Unit or other external cabinet circuitry. If the MMU does not receive a change in state on the EXTERNAL

WATCHDOG input for 1500 msec (_ + 100 msec), the MMU shall enter the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the WATCHDOG fault. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. An MMU Power Failure shall reset the WATCHDOG fault state of the monitor. The EXTERNAL WATCHDOG input shall be wired to connector MSB-S. When operating with Port 1 communications enabled, Bit #70 (Spare Bit #4) of the Type #129 response frame shall be set to indicate an External Watchdog fault has been detected.

(e) **Type Fault Monitor.** The MMU shall verify at power-up that the Type 12 or Type 16 operating mode as determined by the TYPE SELECT input is consistent with the mode set by the last external reset. 2160-14-70 80 of 112 Detection of a Type Fault shall place the MMU into the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the TYPE 12/16 fault. The MMU shall remain in the fault mode until the unit is reset by the RESET button or the EXTERNAL RESET input. An MMU Power Failure shall reset the Type Fault state of the monitor.

(f) **Flashing Yellow Arrow PPLT Support.** The MMU shall be designed to monitor an intersection with up to four approaches using the four section Flashing Yellow Arrow (FYA) movement outlined by the NCHRP Research Project 3-54 on Protected/Permissive signal displays with Flashing Yellow Arrows. Two cabinet configurations shall be supported for both the MMU Type 16 and Type 12 modes depending on the number of load switches provided and the capabilities of the Controller Unit. In both modes the MMU shall be designed to provide the same fault coverage for the FYA approaches as it does for conventional protected left turn phases including Conflict, Red Fail, Dual Indication, and both Minimum Yellow and Minimum Yellow Plus Red Clearance monitoring.

(3) **Configuration Options**

(a) **RYG ONLY Red Fail Option.** The MMU shall provide the capability to exclude the Walk inputs from the Red Fail fault detection algorithm when operating in the Type 12 mode. When the option is selected, the absence of signals on the Green, Yellow, and Red field outputs of a channel will place the MMU unit into the fault mode, transfer the OUTPUT relay contacts to the Fault position, and indicate the RED FAIL fault.

(b) **LED Signal Threshold Adjust.** The MMU shall provide the capability to sense field inputs signals with the following thresholds:

Conflict, Dual Indication Low Threshold Signal Inputs (Green, Yellow, and Red)

No Detect	less than 15 Vrms
Detect	greater than 25 Vrms

Red Fail High Threshold Signal Inputs (Green, Yellow, and Red)

No Detect	less than 50 Vrms
Detect	greater than 70 Vrms

(c) **CVM LOG Disable Option.** The MMU shall provide a means to disable the logging of CVM fault events.

(4) **Display Functions.** The following display functions shall be provided in addition to those required by the NEMA TS-2 Standard Section 4. A PC shall not be required to display the following parameters. 2160-14-70 81 of 112

(a) **Field Signal Voltages Display.** A mode shall be provided to display the RMS voltage of each field signal input. If the MMU is not in the fault mode, the displayed voltage will be the currently applied RMS voltage. If the MMU is in the fault mode, the displayed voltage will be the applied RMS voltage at the time of the fault.

(b) **Cabinet Control Signal Voltages Display.** A mode shall be provided to display the RMS voltage of the AC Line and Red Enable, the frequency of the AC Line, and the ambient temperature measured at the MMU. If the MMU is not in the fault mode, the displayed values will be the currently applied values. If the MMU is in the fault mode, the displayed values will be the applied values at the time of the fault.

(c) **Field Check Status Display.** When the MMU is in the fault mode, a display screen for the front panel display shall be provided to identify all field signal inputs with Field Check status.

(d) **Recurrent Pulse Status Display.** When the MMU is in the fault mode, a display screen for the front panel display shall be provided to identify all field signal inputs with Recurrent Pulse status.

(e) **Configuration Display.** A display mode for the front panel display shall be provided that allows the setting and viewing of all MMU configuration parameters. The configuration parameters provided on the program card shall be viewable only. A PC shall not be required to completely program or view the MMU configuration parameters.

(f) **Event Logs Display.** A display mode for the front panel display shall be provided to review all details of the Previous Fail log, AC Line log, and the Monitor Reset log.

(g) **Clock Set Display**. A display mode for the front panel display shall be provided to view and set the time and date of the MMU real time clock.

(5) **Operating Modes.** The MMU shall operate in both the Type 12 mode and Type 16 mode as required by the NEMA Standard.

(a) **Help System.** A context sensitive Help system shall be provided that is activated by a separate Help button. The Main Status display shall respond with text messages relevant to the position in the menu navigation level. When the MMU is in the fault mode the Help system shall respond with the Diagnostic mode described in 0.2160-14-70 82 of 112.

(b) Setup Wizard. A built-in setup mode shall be provided that automatically configures the Dual Indication enable, Field Check enable, Red Fail enable, and Minimum Yellow Plus Red Clearance enable parameters from user input consisting only of channel assignment and class (vehicle, ped, pp-turn, etc.) responses.

(c) **Diagnostic Wizard.** A built-in Diagnostic Wizard shall be provided that displays detailed diagnostic information regarding the fault being analyzed. This mode shall provide a concise view of the signal states involved in the fault, pinpoint faulty signal inputs, and provide guidance on how the technician should isolate the cause of the malfunction. The Diagnostic Wizard shall be automatically invoked when the MMU is in the fault mode and the HELP button is pressed. It shall also be automatically invoked when the MMU is in the Previous Fail (PF) event log display and the HELP button is pressed.

(d) **TS-1 Type 12 With SDLC Mode.** The MMU shall be capable of operating in the Type 12 mode with SDLC communications enabled on Port 1. The Channel Status display shall operate in the Type 12 configuration and provide the field check function for up to four pedestrian Walk inputs.

(6) **Hardware**

(a) **Enclosure**

i. **Size.** The MMU shall be compact so as to fit in limited cabinet space. It shall be possible to install on a shelf that is at least 7" deep. Overall dimensions, including mating connectors and harness, shall not exceed 10.5" x 4.5" x 11" (H x W x D).

ii. **Material.** The enclosure shall be constructed of sheet aluminum with a minimum thickness of 0.062", and shall be finished with an attractive and durable protective coating. Model, serial number, and program information shall be permanently displayed on the top surface.

(b) **Electronics**

i. **Microprocessor Monitor.** A microprocessor shall be used for all timing and control functions. Continuing operation of the microprocessor shall be verified by an independent monitor circuit, which shall force the OUTPUT RELAY to the de-energized "fault" state and illuminate the DIAGNOSTIC indicator if a pulse is not received from the microprocessor within a defined period not to exceed 500 ms. Only an MMU Power Failure shall reset the DIAGNOSTIC fault state of the monitor.

ii. **RMS Voltage Measurement**. High speed sampling techniques shall be used to determine the true RMS value of the AC field inputs. Each AC input shall be sampled at least 32 times per line cycle. The RMS voltage measurement shall be insensitive to phase, frequency, and waveform distortion.

iii. **Sockets.** In the interest of reliability, no IC sockets shall be used.

iv. **Battery.** All user programmed configuration settings shall be stored in an electrically erasable programmable read-only memory (EEPROM). Designs using a battery to maintain configuration data shall not be acceptable. If a battery is used, it shall provide power only to the real time clock.

v. **Field Input Terminals.** All 120 V AC field terminal inputs shall provide an input impedance of at least 150K ohms and be terminated with a discrete resistor having a power dissipation rating of 0.5 Watts or greater.

vi. **Component Temperature Range.** All electrical components used in the MMU except the front panel Status LCD shall be rated by the component manufacturer to operate over the full NEMA temperature range of -34ºC to +74ºC.

vii. **Printed Circuit Boards.** All printed circuit boards shall meet the requirements of the NEMA Standard plus the following requirements to enhance reliability:

(1) All plated-through holes and exposed circuit traces shall be plated with solder.

(2) Both sides of the printed circuit board shall be covered with a solder mask material.

(3) The circuit reference designation for all components and the polarity of all capacitors and diodes shall be clearly marked adjacent to the component. Pin #1 for all integrated circuit packages shall be designated on both sides of all printed circuit boards.

(4) All printed circuit board assemblies shall be coated on both sides with a clear moisture-proof and fungus-proof sealant.

(c) **Front Panel and Connectors**

i. **MMU Status Display** four line by 20 character alpha-numeric LCD display shall be provided to report MMU status, time and date, menu navigation, etc. This display shall be separate from the full intersection channel status display.

ii. **Full Intersection Channel Status Display.** A separate Red, Yellow, and Green indicator shall be provided for the channel status LCD display for each channel to show full intersection status simultaneously. For Type 12 mode operation a separate Red, Yellow, Green and Walk indicator shall be provided for each channel to show full intersection status simultaneously. Individual icons shall also be provided to indicate channels involved in a fault.

iii. **LED Display Indicators.** The following LED display indicators shall be provided:

(1) **Power Indicator.** The green POWER indicator shall flash at a rate of 2Hz when the AC LINE voltage is below the drop out level. It shall illuminate steadily when the AC LINE voltage returns above the restore level. It shall extinguish when the AC Line voltage is less than 75 Vrms.

(2) **Fault Indicator.** The red FAULT indicator shall illuminate when the MMU is in the fault mode and the OUTPUT relay has transferred to the Fault position.

(3) **Port 1 Receive Indicator.** The yellow RECEIVE indicator shall illuminate for a 40 msec pulse each time a Port 1 message is correctly received from the Controller Unit.

(4) **Port 1 Transmit Indicator.** The yellow TRANSMIT indicator shall illuminate for a 40 msec pulse each time a Port 1 message is transmitted from the MMU.

(5) **EIA-232 Receive Indicator.** The yellow COMM indicator shall illuminate for a 40 msec pulse each time a message is correctly received on the EIA-232 port.

(6) **Diagnostic Indicator.** The red DIAGNOSTIC indicator shall illuminate when the MMU has detected an internal diagnostic failure.

iv. **Controls.** All displays, controls, and connectors shall be mounted on the front panel of the MMU.

(1) **Help Button.** A momentary contact button shall be provided the initiates the context sensitive help system described in 0.

v. **MS Connectors.** The MS connectors on the MMU shall have a metallic shell and be attached to the chassis internally. The connectors shall be mounted on the front of the unit according to the following: Connector A shall intermate with a MS 3116 22-55 SZ, and Connector B shall intermate with a MS 3116 16-26 S. In the interest of reliability and repair ability, printed circuit board mounted MS connectors shall not be acceptable. Internal MS harness wire shall be a minimum of AWG #22, 19 strands.

vi. **EIA-232 Port.** The EIA-232 port shall be electrically isolated from the MMU electronics using optical couplers and shall provide a minimum of 2500 Vrms isolation. The connector shall be an AMP 9721A or equivalent 9 pin metal shell D subminiature type with female contacts. Pin assignments shall be as shown in the following table:

PIN	FUNCTION
1	DCD*
2	TX DATA
3	RX DATA
4	DTR (Data Terminal Ready)
5	SIGNAL GROUND
6	DSR*
7	DSR*
8	CTS*
9	NC

*Jumper options shall be provided to allow the connection of Pin #4 to be made with Pin #7, and the connection of Pin #8 to be made with Pin #1 and or Pin #6.

(d) **Monitor Configuration Parameters.** All Nema standard configuration parameters shall be provided by a program card meeting the requirements of clause 4.3.6 of Nema TS-2. All configuration parameters for functions and options beyond the requirements of the standard shall be stored in non-volatile memory within the MMU. This memory shall be programmable from the front panel menu driven interface, data downloaded via the EIA-232 port, or loaded from shadow memory located on the program card (see 0).

(e) **Program Card Memory.** The program card supplied with the MMU shall provide non-volatile memory that contains the configuration parameters for the enhanced features of the MMU, such that transferring the program card to a different MMU completely configures that MMU. The non-volatile memory device used on the program card shall not utilize any I/O pins designated as "Reserved" by NEMA standards.

(7) **Event Logging Functions**

(a) **General.** The MMU shall be capable of storing in non-volatile memory a minimum of 100 events. Each event shall be marked with the time and date of the event. These events shall consist of fault events, AC Line events, reset events, and configuration change events. The capability to assign a four digit identification number and 30 character description to the unit shall be provided. The event logs shall be uploaded to a PC using the serial port of the MMU and Windows based software provided by the manufacturer. Each event log report shall contain the following information:

i. Monitor ID#: a four digit (0000-9999) ID number and 30 character description assigned to the monitor.

ii. Time and Date: time and date of occurrence.

iii. Event Number: identifies the record number in the log. Event #1 is the most recent event.

(b) **Reports**

i. **Monitor Status Report (CS).** The Current Status report shall contain the following information:

(1) Fault Type: the fault type description.

(2) Field Status: the current GYR(W) field status and field RMS voltages if the monitor is not in the fault state, or the latched field status and field RMS voltages and fault channel status at the time of the fault.

(3) Cabinet Temperature: the current temperature if the monitor is not in the fault state, or the latched temperature at the time of the fault.

(4) AC Line Voltage: the current AC Line voltage and frequency if the monitor is not in the fault state, or the AC Line voltage and frequency at the time of the fault.

(5) Control Input Status: the current state and RMS voltages of the Red Enable input and Load Switch Flash bit input if the monitor is not in the fault state, or the status latched at the time of the fault.

ii. **Previous Fault Log (PF).** The Previous Fault log shall contain the following information:

(1) Fault Type: the fault type description.

(2) Field Status: the latched field status with RMS voltages, fault channel status, RP Detect status and Field Check status at the time of the fault.

(3) Cabinet Temperature: the latched temperature at the time of the fault.

(4) AC Line Voltage: the AC Line voltage and frequency at the time of the fault.

(5) Control Input Status: the latched state of the Red Enable input at the time of the fault.

iii. **AC Line Event Log (AC).** The AC Line log shall contain the following information:

(1) Event Type: describes the type of AC Line event that occurred.
Power-up- AC on, monitor performed a cold start

Interrupt - AC Line < Brownout level

Restore - AC restored from AC brown-out or AC interruption (AC Off), no cold start

(2) AC Line Voltage: the AC Line voltage and frequency at the time of the event.

iv. **Monitor Reset Log (MR).** The Monitor Reset log shall contain the following information:

(1) The monitor was reset from a fault by the front panel Reset button, or External Reset input, or a non-latched event clear.

v. **Configuration Change Log (CF).** The Configuration Change log shall contain the following information:

(1) The status of all configuration programming including the contents of the Program Card.

(2) Any configuration programming inputs such as 24V Inhibit, Port 1 Disable, Type Select.

(3) Configuration Check Value: A unique check value that is based on the configuration of items #a and #b above. The log shall also indicate which items have been changed since the last log entry.

vi. **Signal Sequence Log (SSQ).** A minimum of five logs shall be provided that graphically display all field signal states and Red Enable for up to 30 seconds prior to the current fault trigger event. The resolution of the display shall be at least 50 milliseconds.

(c) **Remote Monitor Configuration**

i. **Setup Wizard.** A setup mode shall be provided by the Windows based software that automatically configures the Dual Indication enable, Field Check enable, Red Fail enable, and Minimum Yellow Plus Red Clearance enable parameters from user input consisting only of channel assignment and class (vehicle, ped, ppturn, etc) responses.

ii. **Upload From File.** All configuration parameters for functions and options beyond the requirements of the standard shall be programmable by transferring a file from a PC to the MMU via the front panel EIA-232 port. These parameters shall be stored in nonvolatile memory in the MMU.

iii. **Download to File.** All configuration parameters for functions and options beyond the requirements of the standard shall be downloadable to a PC by transferring a file from the MMU to a PC via the front panel EIA-232 port.

C Cabinet and Cabinet Equipment

(1) Each controller shall be furnished completely housed in a door-in-door ground mounted metal cabinet that meets the requirements for a TS1 traffic control cabinet assembly. The cabinet assembly shall meet, as a minimum, all applicable NEMA standards. Where differences occur, this specification shall govern.

(2) Each eight phase cabinet shall consist of a size P cabinet capable of being base mounted, type three configuration main panel, 8 position (16 loop) detector rack, and auxiliary equipment as defined this specification.

(3) Cabinet Construction.

Each cabinet shall be constructed from type 5052-H32 aluminum with a minimum thickness of 0.125 inches.

Each cabinet shall be designed and manufactured with materials that will allow rigid mounting, whether intended for pole, base or pedestal mounting. The cabinet must not flex on its mount.

A rain channel shall be incorporated into the design of the main door opening to prevent liquids from entering the enclosure. Each cabinet door opening must be a minimum of 80 percent of the front surface of the cabinet. A stiffener plate shall be welded across the inside of the main door to prevent flexing.

The top of each cabinet shall incorporate a l-inch slope toward the rear to prevent rain accumulation.

Each cabinet shall be supplied with a natural aluminum finish unless otherwise noted. Sufficient care shall be taken in handling to ensure that scratches are minimized. All surfaces shall be free from weld flash. Welds shall be smooth, neatly formed, free from cracks, blowholes and other irregularities. All sharp edges shall be ground smooth.

All seams shall be sealed with RTV sealant or equivalent material on the interior of the cabinet.

All cabinets shall be supplied with two easily removable shelves manufactured from 5052-H32 aluminum. Shelves shall be a minimum of 10 inches deep. The shelf shall have horizontal slots at the rear and vertical slots at the front of the turned down side flange. The shelf shall be installed by first inserting the rear edge of the shelf on the cabinet rear sidewall mounting studs, then lowering the shelf on the front sidewall mounting studs. The shelf shall be held in place by a nylon tie-wrap inserted through holes on the front edge of the shelf and around the front sidewall mounting studs.

The front edge of the upper shelf shall have holes punched every 6 inches to accommodate tie wrapping of cables/harnesses.

One set of vertical "C" channels shall be mounted on each interior wall of the cabinet for the purpose of mounting the cabinet components. The channels shall accommodate spring-mounted nuts or studs. All mounting rails shall extend to within 7 inches of the top and bottom of the cabinets. Sidewall rail spacing shall be 7.88 inches center-to-center. Rear wall rail spacing shall be 18.50 inches center-to-center. (Size 5 and 6 cabinets) or 7.88 inches in size 3 cabinets. The rails shall be mounted to the cabinet with bolts (pressed into plates welded to interior of cabinet) to form a modular assembly.

The main door and police door-in-door shall close against a weatherproof and dustproof, closed-cell neoprene gasket seal. The gasket material for the main door shall be a minimum of 0.250 inches thick by 1.00 inch wide. The gasket material for the police door shall be a minimum of 0.250 inches thick by 0.500 inches wide. The gaskets shall be permanently bonded to the cabinet.

The lower section of the cabinet door shall be equipped with a louvered air entrance. The air inlet shall be large enough to allow sufficient airflow per the rated fan capacity. Louvers must satisfy the NEMA rod entry test for 3R ventilated enclosures. A noncorrosive, vermin- and insect-proof, removable air filter shall be secured to the air entrance. The filter shall fit snugly against the cabinet door wall.

The roof of the cabinet shall incorporate an exhaust plenum with a vent screen. Perforations in the vent screen shall not exceed 0.125 inches in diameter.

The main door hinge shall be a one-piece, continuous piano hinge with a stainless steel pin running the entire length of the door. The hinge shall be attached in such a manner that no rivets or bolts are exposed.

The main door of a size 5 or larger cabinet shall include a mechanism capable of holding the door open at approximately 90, 125, and 150 degrees under windy conditions. Manual placement of the mechanism shall not be required by the field technician. The main door of a size 3 cabinet shall include a mechanism capable of holding the door open at approximately 90 and 150 degrees under windy conditions.

The main door shall be equipped with a Corbin tumbler lock number 1548-1. Two keys shall be supplied.

The police door-in-door shall be provided with a treasury type lock Corbin No. R357SGS or exact equivalent and one key.

All cabinet inside and outside surfaces shall be primed with phosphate treatment and primer. After priming, all exterior surfaces shall receive a minimum of two coats of rust resistant enamel, black in color and interior surfaces shall be furnished with rust resistant high gloss white enamel.

Terminals and Facilities/Main Panel Design and Construction

The main panel shall be constructed from 5052-H32 brushed aluminum of 0.125 inches minimum thickness and formed so as to minimize any flexing when plug-in components are installed.

All position main panels shall be hinged at the bottom to allow easy access to all wiring on the rear of the panel.

The main panel shall be fully wired in the following configuration:

Type 3 Configuration - 12 load switch sockets, 6 flash transfer relay sockets, 1 flasher socket and 2 main panel BIU rack slots.

All load switch and flash transfer relay socket reference designators shall be silk-screen labeled on the front and rear of the main panel to match drawing designations. Socket pins shall be marked for reference on the rear.

Up to eight load switch sockets may be positioned horizontally or stacked in two rows on the main panel. Main panels requiring more than eight load switch sockets shall be mounted in two horizontal rows.

All load switches shall be supported by a bracket extending at least half the length of the load switch.

Rack style mounting shall be provided to accommodate the required BIUs per the configuration listed in section 3.3 above. A dual-row, 64 pin female DIN 41612 Type B connector shall be provided for each BIU rack position. Card guides shall be provided for both edges of the BIU. Terminal and facilities BIU mounting shall be an integral part of the main panel. Detector rack BIU mounting shall be an integral part of the detector rack.

All BIU rack connectors shall have pre-wired address pins corresponding to the requirements of the TS1 specification. The address pins shall control the BIU mode of operation. BIUs shall be capable of being interchanged with no additional programming.

The 12-load switch position main panels shall have all field wires contained on two rows of horizontally mounted terminal blocks. The upper row shall be wired for the pedestrian and overlap field terminations. The lower row shall be reserved for phase one through phase eight vehicle field terminations.

All field output circuits shall be terminated on a barrier type terminal block with a minimum rating of 60 amps.

All field input/output I/0 terminals shall be identified by permanent alphanumerical labels. All labels shall use standard nomenclature per the NEMA TS1 specification.

All field flash sequence programming shall be accomplished at the field terminals with the use of a screwdriver only.

Field terminal blocks shall be wired to use four positions per vehicle or overlap phase (green, yellow, red, flash). It shall not be necessary to de-bus field terminal blocks for flash programming.

It shall also be possible to program which flasher circuit the phase shall be connected to the main panel shall contain at least one flasher socket (silk screen labeled) capable of

operating a 15 amp, 2 pole, NEMA solid state flasher. The flasher shall be supported by a bracket that extends at least half its length.

One RC network shall be wired in parallel with each group of three flash-transfer relays and any other relay coils.

All logic-level, NEMA-controller and Malfunction Management Unit input and output terminations on the main panel shall be permanently labeled. Cabinet prints shall identify the function of each terminal position.

At a minimum, two 20-position terminal blocks shall be provided at the top of the main panel to provide access to the controller unit's programmable and nonprogrammable I/O. Terminal blocks for DC signal interfacing shall have a number 6-32 x 7/32 inch screw as minimum. All main panel wiring shall conform to the following wire size:

Green/Walk load switch output – 14 gauge
Yellow load switch output – 14 gauge
Red/Don't Walk load switch output – 14 gauge
MMU (other than AC power) – 22 gauge
Controller I/O – 22 gauge
AC Line (power panel to main panel), (1 for each 4 LS) – 10 gauge
AC Line (main panel) – 14 gauge
AC Neutral (power panel to main panel) – 10 gauge
Earth ground (power panel) – 8 gauge
Logic ground – 22 gauge
Flash programming – flasher terminal
– 14 gauge
– field terminal
– 14 gauge

All wiring, 14 AWG and smaller, shall conform to MIL W 16878/1, type B/N, 600V, 19-strand tinned copper. The wire shall have a minimum of 0.010 inches thick PVC insulation with clear nylon jacket and rated to 105 degrees Celsius. All 12 AWG and larger wire shall have UL listed THHN/THWN 90 degrees Celsius, 600V, 0.020 inches thick PVC insulation and clear nylon jacketed.

All controller and Malfunction Management Unit cables shall be of sufficient length to allow the units to be placed on either shelf or the outside top of the cabinet in the operating mode. Connecting cables shall be sleeved in a braided nylon mesh. The use of exposed tie-wraps or interwoven cables are unacceptable. All cabinet configurations shall be provided with enough RS-485 Port 1 communication cables to allow full capabilities of that cabinet. Each communication cable connector shall be a 15 pin metal shell D subminiature type. The cable shall be a shielded cable suitable for RS-485 communications.

All main panels shall be pre-wired for a Type-16 Malfunction Management Unit.

Provide necessary terminal for video detection.

All wiring shall be neat in appearance. All cabinet wiring shall be continuous from its point of origin to its termination point. Butt type connections/splices are not acceptable. All control cables shall be protected by a nylon jacket or equivalent protection to prevent any contact with cabinet metal shelves, doors and any other sharp comers.

All connecting cables and wire runs shall be secured by mechanical clamps. Stick-on type clamps are not acceptable.

The grounding system in the cabinet shall be divided into three separate circuits (AC Neutral, Earth Ground, and Logic Ground). These ground circuits shall be connected together at a single point as outlined in the NEMA TS2 Standard.

All pedestrian pushbutton inputs from the field to the controller shall be opto-isolated through the BIU and operate at 12 VAC.

All wire (size 16 AWG or smaller) at solder joints shall be hooked or looped around the eyelet or terminal block post prior to soldering to ensure circuit integrity. Lap joint soldering is not acceptable.

Power Panel Design and Construction
The power panel shall consist of a separate, wholly enclosed module, securely fastened to the right sidewall of the cabinet. The power panel shall be wired to provide the necessary power to the cabinet, controller, Malfunction Management Unit, cabinet power supply and auxiliary equipment.

Auxiliary Cabinet Equipment
The cabinet shall be provided with a thermostatically controlled (adjustable between 80-150 degrees Fahrenheit) ventilation fan in the top of the cabinet plenum. The fan shall be a ball bearing type fan and shall be capable of drawing a minimum of 100 cubic feet of air per minute. The fan unit shall not crack, creep, warp or have bearing failure within a 7 year duty cycle. The maximum noise level shall be less than 40 decibels. The fan unit shall be corrosion resistant.

A 25-watt incandescent lamp shall be included. The lamp shall be wired to a door activated switch mounted near the top of the door. Provide a 15 amp circuit breaker for auxiliary equipment, 20 amp circuit breaker for street lights and a non-GFI outlet for additional equipment.

Provide a single photocell and contactor for all street lighting powered from the traffic signal cabinet. Install all additional control units in cabinet per plans. Control units include, but are not limited to: emergency vehicle preemption control device including card rack and video detection processor.

Provide a sealable print pouch shall be mounted to the door of the cabinet. The pouch shall be of sufficient size to accommodate one complete set of cabinet prints. Provide two sets of complete and accurate cabinet drawings shall be supplied with each cabinet. Provide one set of manuals for each controller supplied.

Vehicle Detection
A vehicle detector amplifier rack shall be provided in each cabinet. Detector racks shall be in the following configuration and shall support up to 16 channels of loop detection and up to 3 BIUs.

Each cabinet shall contain detector interface panels for the purpose of connecting field loops and vehicle detector amplifiers. The panels shall be manufactured from FR4 G10 fiberglass, 0.062 inches thick, with a minimum of 2 oz. of copper for all traces.

One 16-position interface panel shall be provided for each 16 channel rack. The interface panel shall be secured to a mounting plate and attached to the left sidewall of the cabinet.

Each interface panel shall allow for the connection of 8 or 16 independent field loops. A ground bus terminal shall be provided between each loop pair terminal to provide a termination for the loop lead-in cable ground wire.

Lightning protection device mounting holes shall be provided to accommodate an Edco SRA-16C, or Edco SRA-6, or Edco LCA-6, or a varistor lightning protection device. Lightning protection devices shall not be provided.

A cable consisting of 20 AWG twisted pair wires shall be provided to enable connection to and from the panel to a detector rack. The twisted pair wires shall be color-coded red and white wires.

All termination points shall be identified by a unique number and silk screened on the panel.

Each detector rack shall be powered by the cabinet power supply (refer to section 9.6 of this specification).

Cabinet Test Switches and Police Panel
A test switch panel shall be mounted on the inside of the main door. The test switch panel shall provide the following:

(1) **Auto/Flash Switch.** When in the flash position, power shall be maintained to the controller and the intersection shall be placed in flash. The controller shall not be stop timed when in flash.

(2) **Stop Time Switch.** When applied, the controller shall be stop timed in the current interval.

(3) **Control Equipment Power On/Off.** This switch shall control the controller, MMU, and cabinet power supply AC power.

The police door switch panel shall contain the following:

(1) **Signals On/Off Switch.** In the OFF position, power shall be removed from signal heads in the intersection. The controller shall continue to operate. When in the OFF position, the MMU shall not conflict or require reset.

(2) **Flash/Normal Switch.** In the flash position, power shall be maintained to the controller and the intersection shall be placed in flash. The controller shall not be stop timed when in flash.

All toggle type switches shall be heavy duty and rated 15 amps minimum. Single- or double-pole switches may be provided, as required.

Any exposed terminals or switch solder points shall be covered with a non-flexible shield to prevent accidental contact.

All switch functions must be permanently and clearly labeled.

All wire routed to the police door-in-door and test switch pushbutton panel shall be adequately protected against damage from repetitive opening and closing of the main door.

All test switch panel wiring shall be connected to the main panel via a multiple pin type connector.

Auxiliary Devices

(a) **Load Switches.** Load switches shall be solid state and shall conform to NEMA TS1 requirements. Load switches shall be dedicated per phase. The use of load switches for other partial phases is not acceptable.

(b) **Flashers.** The flasher shall be solid state and shall conform to NEMA TS1 requirements.

(c) **Flash Transfer Relays.** All flash transfer relays shall meet NEMA TS1 requirements. The coil of the flash transfer relay must be deenergized for flash operation.

(d) **Bus Interface Units.** All Bus Interface Units (Bills) shall meet NEMA TS1 requirements.

The full complement of Bus Interface Units shall be supplied with each cabinet to allow for maximum phase and function utilization for which the cabinet is designed. BIU's shall be from the same manufacturer as the controller manufacturer used by the city.

Each Bus Interface Unit shall include power on, transmit and valid data indicators. All indicators shall be LEDs.

(e) **Cabinet Power Supply.** The cabinet power supply shall meet NEMA TS 1 requirements.

The cabinet power supply shall provide LED indicators for the line frequency, 12 VDC, 12 VAC, and 24 VDC outputs.

The cabinet power supply shall provide (on the front panel) jack plugs for access to the +24 VDC for test purposes. One cabinet power supply shall be supplied with each cabinet assembly.

D Equipment List and Drawings.

Detailed shop drawings of the control cabinet, equipment layout drawings and wiring diagrams of all equipment installed in the controller cabinet shall be submitted to the city for approval. Two sets of cabinet wiring diagrams shall be contained in a heavy duty clear plastic envelope mounted on the inside of the front door.

At the time of delivery, the contractor shall furnish one set of instruction manuals and an itemized price list for each type of equipment, their subassemblies, and their replacement parts. The instruction book shall include the following information: a) Table of Contents, b) operating procedure, c) step-by-step maintenance and troubleshooting information for the entire assembly, d) circuit wiring diagrams, e) pictorial diagrams of parts locations, f) parts numbers, and g) theory of operation. The instructional manuals shall include itemized parts lists. The itemized parts lists shall include the manufacturer's name and parts number for all components (such as IC', diodes, switches, relays, etc.) used in each piece of equipment. The list shall include cross references to parts numbers of other manufacturers who make the same replacement parts.

E Supplier Warranty

(1) The contractor shall certify that the equipment meets the required specification and shall supply a complete catalog description. The following documents shall also be provided:

(a) A warranty statement which stipulates that equipment to be supplied shall be warranted for two years from the date of purchase.

(b) Operations manuals.

(c) Maintenance manuals.

(d) Schematic diagrams.

(e) Component and equipment locations within the cabinet.

(2) If a malfunction in the controller unit, or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction during the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the city shall then return the spare component to the supplier.

(3) Controller Operation. Consistent with customary trade practices, the manufacturer shall furnish a warranty for all electrical or mechanical equipment described herein. The contractor shall turn such warranty over to the owner for potential dealing with the guarantor. If the contractor is the guarantor, he specifically waives the requirements of Section 289.14(2), Wisconsin Statutes, and agrees as a condition of the contract that the owner may maintain an action against him at any time during the warranty period for recovery of damages which the city may have sustained by reason of the failure of the contractor to comply with the provisions of the warranty provided to the owner.

(4) During the installation and testing of the controller, the contractor shall provide, at his own expense, a competent representative to oversee, direct and manage the installation and testing of the controller. In the final stages of the installation and testing, the manufacturer's representative shall be available at the job site for consultation until such time as the controller operation is tested and accepted.

If a malfunction in the controller unit or its auxiliary equipment occurs during the warranty period, the supplier shall, within 24 hours after notification (excluding Saturday and Sunday), furnish a like controller unit, module, or auxiliary equipment, for use while the warranted unit is being repaired. The isolation of any malfunction and the repair and/or replacement of any device within the warranty period shall be the responsibility of the supplier. After the supplier has repaired and returned the equipment, the city shall return the spare component to the supplier.

F Measurement

The department will measure Furnish and Install Traffic Signal Cabinet and Controller STH 16 & 5th Avenue South as a complete lump sum unit of work, acceptably completed.

G Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.63	Furnish and Install Traffic Signal Cabinet and Controller STH 16 & 5th Avenue South	LS

Payment is full compensation for furnishing and installing the signal controller and conflict monitor together with cabinet, all required control units, all additional harnesses for preemption, switches for flashing operation, and fittings as are necessary to assure that the controller will perform the said functions.

77. Remove and Salvage EVP Equipment STH 16 & 5th Avenue South, Item SPV.0105.64.

A Description
This special provision describes removing, salvaging, storing, reinstalling and testing as shown in the plans, and as hereinafter provided.

B Materials
Salvage and reinstall all existing equipment.

Traffic Signal EVP Detector Cable to be paid for separately.

Mounting equipment for the EVP detector shall be considered incidental to this item.

C Construction
Install salvaged EVP equipment as the plans show and to match original conditions and operations. Dispose of existing cables and terminations.

D Measurement
The department will measure Remove and Salvage EVP Equipment STH 16 & 5th Avenue South as a single lump sum unit for all services, acceptably completed under the contract.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.64	Remove and Salvage EVP Equipment STH 16 & 5th Avenue South	LS

Payment is full compensation for removing, storing, and installing salvaged EVP equipment.

78. Permeable Interlocking Concrete Pavers, Item SPV.0165.01.

A Description
This special provision describes furnishing, hauling and constructing a system of permeable interlocking concrete pavers on a permeable, open-graded crushed stone bedding over an open-graded base and a stone sub-base as shown in the plans, and as hereinafter provided.

B Materials
B.1 Permeable Pavers
Furnish "Holland Eco" permeable concrete pavers as produced by Interlock Concrete Products Inc., Jordan, Minnesota, or approved equal. Paver color shall be the red/red/charcoal "Rosewood" color, also known as the "La Crosse" blend. Thickness shall be 3-1/8-Inch (8cm) minimum.

Deliver pavers to the job site in manufacturer's original, unopened, undamaged container packaging with identification tags intact on each paver bundle. Coordinate delivery and paving schedule to minimize interference with normal use of properties adjacent to paving. Deliver concrete pavers to the job site in steel banded, plastic banded, or plastic wrapped cubes capable of transfer by forklift or clamp lift. Unload pavers at job site in such a manner that no damage occurs to the product or existing construction. Store materials such that they are kept free from mud, dirt, and other foreign materials.

B.2 Stone Materials

B.2.1 General Requirements for Stone Materials

All stone materials shall be washed with less than 1% passing the No. 200 sieve. Use crushed stone with 90% fractured faces, LA Abrasion < 40 per ASTM C 131, minimum CBR of 80% per ASTM D 1883. Do not use rounded river gravel for vehicular applications. Substitutions may be permitted for gradations for crushed stone jointing material, base and subbase materials. Base and subbase materials shall have a minimum 0.32 void ratio. All substitutions shall be approved in writing by the engineer.

B.2.2 Gradation Requirements

Furnish joint/opening filler, bedding, base and subbase materials conforming to ASTM D 448 gradation requirements as shown in Tables 1, 2 and 3 below:

Table 1: ASTM No. 8 Bedding & Joint/Opening Filler*

Sieve Size	Percent Passing
12.5 mm (1/2 in.)	100
9.5 mm (3/8 in.)	85 to 100
4.75 mm (No. 4)	10 to 30
2.36 mm (No. 8)	0 to 10
1.16 mm (No. 16)	0 to 5

*No. 89 stone or that having similar gradation and infiltration rates may be used to fill pavers with narrow joints.

Table 2: ASTM No. 57 Base

Sieve Size	Percent Passing
37.5 mm (1 1/2 in.)	100
25 mm (1 in.)	95 to 100
12.5 mm (1/2 in.)	25 to 60
4.75 mm (No. 4)	0 to 10
2.36 mm (No. 8)	0 to 5

Table 3: ASTM No. 2 Subbase

Sieve Size	Percent Passing
75 mm (3 in.)	100
63 mm (2 1/2 in.)	90 to 100
50 mm (2 in.)	35 to 70
37.5 mm (1 1/2 in.)	0 to 15
19 mm (3/4 in.)	0 to 5

B.3 Geotextile Fabric
Furnish Geotextile Fabric, Type DF, Schedule A according to standard spec 645.2.4.

C Construction
The elevations and surface tolerance of the soil subgrade determine the final surface elevations of concrete pavers. The paver installer cannot correct deficiencies in excavation and grading of the soil subgrade with additional bedding materials. Therefore, the surface elevations of the soil subgrade are critical.

Excessive disturbance of the soil subgrade may require compaction of the soil subgrade, as determined by the engineer. If the soil subgrade requires compaction, compact to a minimum of 95% standard Proctor density per ASTM C 698. Do not proceed with installation of bedding and interlocking concrete pavers until subgrade soil conditions are corrected. Verify that subgrade preparation, compacted density and elevations conform to plan requirements. Do not install in rain or snow. Do not install frozen bedding materials. Verify that the soil subgrade is free from standing water.

Stockpile joint/opening filler, base and subbase materials such that they are free from standing water, uniformly graded, free of any organic material or sediment, debris, and ready for placement. Edge restraints per the plans, at the indicated elevations, must be in place. No mud or sediment can be left on the base or bedding aggregates. If they are contaminated, they must be removed and replaced with clean materials.

Geotextile fabric shall be placed on the bottom and sides of soil subgrade and secure in place to prevent wrinkling and displacement during stone material placement operations. Overlaps in fabric shall be a minimum of 12 inches.

Moisten, spread and compact the No. 2 subbase in 4 to 6 inch lifts without wrinkling, folding or displacing the geotextile fabric. Place the subbase material systematically to protect geotextile, and prevent movement during placement. For each lift, make at least two passes in the vibratory mode then at least two in the static mode with vibratory equipment until there is no visible movement of the No. 2 stone. Do not crush the subbase material during vibratory operations. The surface tolerance of the compacted No. 2 subbase shall be ± 2-½ inches over a 10 foot straightedge.

Moisten, spread and compact the No. 57 base layer in one 4 inch thick lift. Make at least two passes in the vibratory mode then at least two in the static mode with vibratory equipment until there is no visible movement of the No. 2 stone. Do not crush the material

with the vibratory equipment. The surface tolerance the compacted No. 57 base should not deviate more than ±1 inch over a 10 foot straightedge.

Moisten, spread and screed the No. 8 stone bedding material. Fill voids left by removed screed rails with No. 8 stone. The surface tolerance of the screeded No. 8 bedding layer shall be ±3/8 inch over a 10 foot straightedge. Do not allow disturbance of screeded bedding material before paving unit installation begins.

Install the permeable paving units in the pattern(s) and joint widths shown on the plans, maintaining straight pattern lines. Fill gaps at the edges of the paved area with cut units. Cut pavers subject to tire traffic shall be no smaller than 1/3 of a whole unit. Cut pavers and place along the edges with a masonry saw. Fill the openings and joints with No. 8 stone, or approved substitute material.

Remove excess aggregate on the surface by sweeping pavers clean. Compact and seat the pavers into the bedding material using a low-amplitude plate compactor. At least two passes with the plate compactor shall be required. Do not compact within 6 feet of unrestrained edges of the paving units. Apply additional aggregate to the openings and joints as needed, filling them completely. Remove excess aggregate by sweeping then compact the pavers. This requires at least two passes with the plate compactor. All pavers within 6 feet of the laying face must be left fully compacted at the completion of each day.

The final surface tolerance of compacted pavers shall not deviate more than ±3/8 inch under a 10 foot long straightedge. The surface elevation of pavers shall be 1/8 to 1/4 inch above adjacent edge restraints, drainage inlets, concrete collars or channels. After sweeping the surface clean, check final elevations for conformance to the drawings. There shall be no greater than 1/8 inch difference (lippage) in height between adjacent pavers. Bond line(s) tolerance for paver courses shall be ±½ inch over a 50 foot string line.

After work is complete, protect the completed work from sediment deposition and damage due to subsequent construction activity on the site.

D Measurement

The department will measure Permeable Interlocking Concrete Pavers by the square foot, acceptably completed.

E Payment

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0165.01	Permeable Interlocking Concrete Pavers	SF

Payment is full compensation for providing and placing all materials including pavers, bedding and joint/opening filler material, subbase material, and base material; for excavating and preparing the foundation; and backfilling and disposing of surplus material.

The department will pay separately for the geotextile fabric under the Geotextile Fabrics bid items of standard specification 645.

79. Shredded Hardwood Bark Mulch, Item SPV.0180.60.

A Description
This special provision describes furnishing and installing Shredded Hardwood Bark Mulch at the locations shown on the plans and according to the requirements of standard spec 632, the plans, and as hereinafter provided.

B Materials
Provide Shredded Hardwood Bark Mulch, as shown on plan and according to standard spec 632.2.6.

Shredded Hardwood Bark Mulch shall be finely shredded hardwood bark mulch and shall be the product of a mechanical chipper, hammermill, or tub grinder. The material shall be fibrous and uniformly dark brown in color, free of large wood chunks, and shall be substantially free of mold, dirt, sawdust, and foreign material. No portion of the material shall be in an advanced state of decomposition. The material shall not contain chipped up manufactured boards or chemically treated wood, including but not limited to wafer board, particle board, and chromated copper arsenate (CCA) or penta-treated wood. The material shall contain no bark of the black walnut tree. The material, when air dried, shall all pass a 4-inch screen and no more than 20 percent by mass of the material shall pass a 0.10-inch sieve. Unattached bark or greenleaf composition, either singly or combined, shall not exceed 20 percent each by mass. The maximum length of individual pieces shall not exceed 4 inches.

C Construction
Install mulch according to standard spec 632.3.9 to a depth of 3 inches over entire area of bed.

Do not use any weed barrier fabric in bark mulch areas.

Place the hardwood bark mulch in such a manner as to not damage plants already in place.

D Measurement
The department will measure Shredded Hardwood Bark Mulch by the square yard, acceptably completed.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0180.60	Shredded Hardwood Bark Mulch	SY

Payment is full compensation for furnishing and installing all materials.

ADDITIONAL SPECIAL PROVISION 1 (ASP 1)
FOR TRANSPORTATION ALLIANCE FOR NEW SOLUTIONS (TrANS)
PROGRAM EMPLOYMENT PLACEMENTS AND APPRENTICESHIPS

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Section 5204(e) – Surface Transportation Workforce Development Training and Education, provides for 100 percent Federal funding if the core program funds are used for training, education, or workforce development purposes, including "pipeline" activities. The core programs includes: Congestion Mitigation and Air Quality Improvement (CMAQ) Program, Highway Bridge Program (HBP), Interstate Maintenance (IM), National Highway System (NHS), and Surface Transportation Program (STP). These workforce development activities cover surface transportation workers, including OJT/SS programs for women and minorities as authorized in 23 U.S.C. §140(b).

TrANS is an employment program originally established in 1995 in Southeastern Wisconsin. Currently TrANS has expanded to include TrANS program locations to serve contractors in Southeast (Milwaukee and surrounding counties), Southcentral (Dane County and surrounding counties including Rock County), and most Northeastern Wisconsin counties from locations in Keshena, Rhinelander and surrounding far Northern areas. TrANS attempts to meet contractor's needs in other geographic locations as possible. It is an industry driven plan of services to address the outreach, preparation, placement and retention of women, minorities and non-minorities as laborers and apprentices in the highway skilled trades. These candidate preparation and contractor coordination services are provided by community based organizations. For a list of the TrANS Coordinators contact the Disadvantaged Business Enterprise Office at (414) 438-4583 in Milwaukee or (608) 266-6961 in Madison. These services are provided to you at no cost.

I. BASIC CONCEPTS

Training reimbursements to employing contractors for new placements, rehires or promotions to apprentice of TrANS Program graduates will be made as follows:

1) **On-the-Job Training, Item ASP.1T0G, ASP 1 Graduate.** At the rate of $5.00 per hour on federal aid projects when TrANS graduates are initially hired, or seasonally rehired, as unskilled laborers or the equivalent.

   Eligibility and Duration: To the employing contractor, for up to 2000 hours from the point of initial hire as a TrANS program placement.

   Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __1__ *(number)* TrANS Graduate(s) be utilized on this contract.

2) **On-the-Job Training, Item ASP.1T0A, ASP 1 Apprentice.** At the rate of $5.00 per hour on federal aid projects at the point when an employee who came out of the TrANS Program is subsequently entered into an apprenticeship contract in an underutilized skilled trade (this will include the Skilled Laborer Apprenticeship when that standard is implemented).

Eligibility and Duration: To the employing contractor, for the length of time the TrANS graduate is in apprentice status.

Contract Goal: To maintain the intent of the Equal Employment Opportunity program, it is a goal that __1__ *(number)* TrANS Apprentice(s) be utilized on this contract.

3) The maximum duration of reimbursement is two years as a TrANS graduate plus time in apprentice status.

4) If a TrANS program is not available in the contractor's area and another training program is utilized, payment of On-the-Job Training hours may be approved by the Wisconsin Department of Transportation (WisDOT) if the training program meets the established acceptance criteria. Only On-the-Job Training Hours accumulated after WisDOT approval will be reimbursed as specified under Items ASP.1T0G and ASP.1T0A. For more information, contact the Disadvantaged Business Enterprise Office at the phone numbers listed above.

5) WisDOT reserves the right to deny payments under items ASP.1T0G and ASP.1T0A if the contractor either fails to provide training or there is evidence of a lack of good faith in meeting the requirements of this training special provision.

I. RATIONALE AND SPECIAL NOTE

The $5.00 per hour now being paid for TrANS placements is intended to cover the duration of two years to allow for reaching entry-level laborer status. An additional incentive, the $5.00 rate, would promote movement into the underutilized skilled trades' apprenticeships and applies until the individual completes their apprenticeship. These incentives benefit TrANS candidates by giving them a better opportunity to enter a skilled trade; benefits contractors who will be assisted in meeting their EEO profiles and goals; and benefits the public who will see the program reinforce larger public-private employment reform in Wisconsin. The pool of TrANS graduates was created for the purpose of addressing underutilization in the skilled trades, an objective that is further reinforced by a parallel retention pilot program, known as the Companywide Reporting. *Whether or not reimbursement is involved, the WisDOT reassures contractors who are in the Companywide Program that TrANS placements still contribute toward fulfilling the new hire goal of 50% women and minorities.* Based on data administered by United States Department of Labor (US DOL), the highway skilled trades remain underutilized for women statewide (less than 6.9%); and for minorities in all counties (% varies by county).

NOTE: *Unless using other advancement strategies, contractors are encouraged to use some or all of this monetary incentive to offset the cut in hourly wages an individual may incur when entering an apprenticeship if the full general laborer hourly rate has been previously paid. No special accounting measures are required.*

II. IMPLEMENTATION

The implementation of ASP 1 is intended to cover only the amount of time it takes for underutilization to be resolved across the trades. This will be measured annually at the county and/or state levels using data administered by WisDWD in relation to goals set by the USDOL-

OFCCP. With appropriate state and federal approvals, we may also do some measurement at the company level.

It is the contractor's responsibility to note on their Certified Payrolls if their employee is a TrANS graduate or a TrANS apprentice. The District EEO Coordinators utilize the information on the Certified Payrolls to track the hours accumulated by TrANS Graduates and TrANS apprentices on WisDOT contracts. Payment under this ASP 1 is made based on the hours recorded off of the Certified Payrolls. Tracking may eventually include improved linkages with the WisDWD apprentice database, information from company and committee level sources.

TrANS is nondiscriminatory by regulation, and is a tool for optional use by contractors to address the underutilization of women and minorities as laborers and apprentices in our industry's skilled trades.

IV. *TRANS TRAINING*

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided to employees enrolled in apprenticeship and on-the-job training programs as follows:

The contractor shall provide on-the-job training aimed at developing full journey workers in the type of trade or job classifications involved. In the event the contractor subcontracts a portion of the contract work, the contractor shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this training special provision is made applicable to such subcontract.

Training and upgrading of minorities and women toward journey workers status is a primary objective of this training special provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority trainees and women trainees); to the extent such persons are available within a reasonable area of recruitment. The contractor will be given an opportunity and will be responsible for demonstrating the steps that they have taken in pursuance thereof, prior to determination as to whether the contractor is in compliance with this training special provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journey workers status or in which they have been employed as a journey worker. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the contractor's records should document the findings in each case.

V. APPRENTICESHIP TRAINING

The Federal Highway Administration's (FHWA) policy is to require full use of all available training and skill improvement opportunities to assure increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The FHWA On-the-Job Training (OJT) Program requires the State transportation agencies (STAs) to establish apprenticeships and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of members of these groups in highway construction skilled crafts.

The OJT Supportive Services (OJT/SS) Program was established in Title 23 Code of Federal Regulations (CFR), Part 230) to supplement the OJT program and support STA training programs by providing services to highway construction contractors and assistance to highway construction apprentices and trainees. The primary objectives of OJT/SS are:

(1) To increase the overall effectiveness of the State highway agencies' approved training programs.
(2) To seek other ways to increase the training opportunities for women, minorities, and disadvantaged individuals.

The STAs are responsible for establishing procedures, subject to the availability of Surface Transportation and Bridge Funds under 23 U.S.C. §140(b*)* (Nondiscrimination), for the provision of supportive services with respect to training programs approved under 23 CFR, Part 230(a*)* (Equal Employment Opportunity on Federal and Federal-aid Construction Contracts – including Supportive Services).

The contractor and subcontractor shall maintain records to demonstrate compliance with these apprenticeship requirements. Reasonable exemptions and modifications to and from any or all of these requirements will be determined by the Wisconsin Department of Transportation-Civil Rights Office. A request for an exemption or modification, with justification, shall be made in writing, addressed to WisDOT Civil Rights Office, 4802 Sheboygan Avenue, P.O. Box 7965, Rm. 451, Madison, WI 53707.

ADDITIONAL SPECIAL PROVISION 3
DISADVANTAGED BUSINESS ENTERPRISE PROGRAM

1. Description

General

a. The disadvantaged business enterprise (DBE) requirements of 49 CFR Part 26 apply to this contract. The department's DBE goal is shown on the cover of the bidding proposal. The contractor can meet the specified contract DBE goal by procuring services or materials from a DBE or by subcontracting work to a DBE. The department calculates the DBE participation as the dollar value of DBE participation included in the bid expressed as a percentage of the total contract bid amount.

b. Under the contract, the contractor agrees to provide the assistance to participating DBE's in the following areas:

   i. Produce accurate and complete quotes.
   ii. Understand highway plans applicable to their work.
   iii. Understand specifications and contract requirements applicable to their work.
   iv. Understand contracting reporting requirements.

c. The department encourages the contractor to assist and develop DBE firms to become fully knowledgeable contractors to successfully perform on its contracts.

d. For information on the disadvantaged business program, visit the department's Civil Rights and Compliance Section website at:

   http://wisconsindot.gov/Pages/doing-bus/civil-rights/dbe/default.aspx

2. Definitions

a. Interpret these terms, used throughout this additional special provision, as follows:

   i. **Bid Percentage:** The DBE percentage indicated in the bidding proposal at the time of bid.
   ii. **DBE:** A disadvantaged business enterprise (DBE) certified as a DBE by the department and included on the department's list of certified DBE's who are determined to be ready, willing and able.
   iii. **DBE goal:** The amount of DBE participation expected in the contract as shown on the cover of the Highway Work Proposal.
   iv. **Discretionary Goal:** A contractor assigned DBE goal, typically abbreviated as “Disc” on the cover of the Highway Work Proposal, which is enforced as committed.
   v. **Manufacturer:** A firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract.
   vi. **Supplier:** A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under the contract are bought, kept in stock, and regularly sold or leased to the public.
   vii. **Voluntary Achievement:** The amount of DBE participation achieved and reported in the contract in excess of the assigned goal.

3. DBE Percentage Required at Bid Submission

Indicate the bid percentage (i.e. 0% through 100%) of DBE participation on the completed bidding proposal, including projects with discretionary goals. For electronic submittals, show the percentage in the miscellaneous data folder, Item 3, DBE Percent. For paper submittals, show the percentage on the sheet included after the schedule of items. By submission of the bid, the bidder contractually

commits to DBE participation at or above the bid percentage, or certifies that they have utilized comprehensive good faith efforts to solicit and utilize DBE firms to meet the DBE participation requirements of this contract proposal, and that the bid percentage is reflective of these good faith efforts. If the bidder does not indicate the bid percentage of DBE participation on the completed bidding proposal, the department will consider the bid irregular and may reject the bid.

4. Department's DBE Evaluation Process

a. Documentation Submittal

Within 10 business days after the notification of contract award, the contractor is to identify, by name, the DBE firms whose utilization is intended to satisfy this provision, the items of work of the DBE subcontract or supply agreement and the dollar value of those items of work by completing the Commitment to Subcontract to DBE Form [DT1506] and all necessary attachment A forms, as well as, Good Faith Waiver Form [DT1202] and supporting documentation as necessary. If the contractor fails to furnish the required forms within the specified time, the department may cancel the award. Delay in fulfilling this requirement is not a cause for extension of the contract time and shall not be used as a tool to delay execution.

i. Bidder Meets DBE Goal

If the bidder indicates that the contract DBE goal is met, after award and before execution, the department will evaluate the Commitment to Subcontract to DBE Form DT1506 and attachment A(s) to verify the actual DBE percentage achieved. If the DBE commitment is verified, the contract is eligible for execution with respect to the DBE commitment.

ii. Bidder Does Not Meet DBE Goal

(1) If the bidder indicates a bid percentage on the Commitment to Subcontract to DBE Form [DT1506] that does not meet the contract DBE goal, the bidder must submit a Good Faith Waiver Form [DT1202] and supporting documentation. After award and before execution, the department will evaluate the bidder's DBE commitment and consider the bidder's good faith waiver request.

(2) The department will review the bidder's good faith waiver request and notify the bidder of one of the following:

a. If the department grants a good faith waiver, the bid is eligible for contract execution with respect to DBE commitment.

b. If the department rejects the good faith waiver request, the department may declare the bid ineligible for execution. The department will provide a written explanation of why the good faith waiver request was rejected. The bidder may appeal the department's rejection as allowed under 7 a. & b.

5. Department's Criteria for Good Faith Effort

The Code of Federal Regulations {CFR}, 49 CFR Part 26-Appendix A, is the guiding regulation concerning good faith efforts. However, the federal regulations do not define “good faith” but states that bidder must actively and aggressively attempt to meet the goal. The federal regulations are general and do not include every factor or effort that can be considered. As a result, each state must establish its own processes and consider the factors established in its own process when making a determination of good faith.

a. The department will only grant a good faith waiver if the bidder has made the effort, given the relevant circumstances under the contract that a bidder actively and aggressively seeking to meet the goal would make. The department will evaluate the bidder's good faith effort to determine whether a good faith waiver will be granted. The bidder must demonstrate, on the DT1202 that they

have aggressively solicited DBE participation in an attempt to meet the contract DBE goal and attaining the stated DBE goal is not feasible.

b. The department, in conjunction with industry stakeholders, has developed the following guidance for contractor good faith effort. The guidance and the attached appendices provide a framework for the actions required by all parties in the processing and evaluation of bidder's total efforts to achieve the project specific DBE goal prior to the bid letting date.

c. Prime Contractors should:

i. Document all efforts and decisions made toward achieving the DBE goal on the contract. The bidder should use the Civil Rights & Compliance System [CRCS] and related WisDOT-approved DBE outreach tools, including the Bid Express Small Business Network, to foster DBE participation on all applicable contracts.

ii. Request quotes by identifying potential items to subcontract and solicit. Prime contractors are strongly encouraged to include in their initial contacts a single page including a detailed list of items for which they are accepting quotes, by project, within a letting. *See attached sample entitled "Sample Contractor Solicitation Letter" in Appendix A*. Prime contractors should also indicate a willingness to accept quotes in areas they are planning to perform themselves, ***as required by federal rules***. In some cases, it might be appropriate to use DBE's to do work in a prime contractor's area of specialization.

(1) Solicit quotes through all reasonable and available means from certified DBE firms who match 'possible items to subcontract' and send copies to DBESS office, highlighting areas in which you are seeking quotes. Email is acceptable.

(2) SBN is the preferred outreach tool. https://www.bidx.com/wi/main Other acceptable means include postal mail, email, fax, phone call.

a. Primes must ask DBE firms for a response in their solicitations. See *Sample Contractors Solicitation Letter* in Appendix. This letter can be included as an attachment to the SBN sub-quote request.

b. Solicit quotes at least 10 calendar days prior to the letting date {ideally two Fridays before the letting} to allow DBE firms sufficient time to respond. Prime contractors should contact DBE firms early, asking them if they need help in putting together a quote, or helping to arrange for equipment needs, or solve other problems.

(3) Second solicitation should take place within 5 days

a. An email solicitation is highly recommended for this second solicitation

(4) Upon request, provide interested DBE firms with adequate information about plans, specifications and the requirements of the contract by letter, information session, email, phone call and/or referral.

(5) When potential exists, advise interested DBE firms on how to obtain bonding, line of credit or insurance as may be requested.

(6) Document DBE firm's interest in quoting by taking appropriate steps to follow up initial solicitation with:

a. Email to all prospective DBE firms in relevant work areas
b. Phone call log to DBE firms who express interest via written response or call.
c. Fax/letter confirmation
d. Copy of the DBE quotes
e. Signed copy of Bid Express SBN Record of Subcontractor Outreach Effort.

d. Evaluate DBE quotes as documentation is critical if the prime does not utilize the DBE firm's quote for any reason.

   i. Evaluate DBE firm's capability to perform 'possible items to subcontract' using legitimate reasons, including but not limited to, ***a discussion with the DBE firm*** regarding its capabilities prior to the bid letting. If lack of capacity is your reason for not utilizing the DBE quote, you are required to contact the DBE directly regarding their ability to perform the work indicated in the UCP directory as their work area [NAICS code]; only the work area and/or NAICS code listed in the UCP directory will be counted for DBE credit. Documentation of the conversation is required.

   ii. In striving to meet a DBE conscious contract goal, prime contractors are expected to use DBE quotes that are responsive and reasonable. This includes DBE quotes that are not the low quote.

   iii. **Special Circumstance:** Evaluation of DBE quotes with tied bid items. "Tied quotes are the condition in which a subcontractor submits quotes including multiple areas of expertise across multiple work areas noting that the items and price are tied. Typically this type of quoting represents a cost saving to the prime but is not clearly stated as a discount; tied quotes are usually presented as 'all or none' quote to the prime." When non-DBE subcontractors submit tied bid items in their quotes to the prime, the DBE firms' quote may seem not competitive. In such a case, the following steps are taken in comparing the relevant quotes. These are qualitative examples.

      (1) Compare bid items common to both quotes, noting the reasonableness in the price comparison.

      (2) Review quotes from other firms for the bid items not quoted by the DBE firm to see if combining both can provide the same competitive advantage that the tied bid items offered.

e. After notification of contract award, submit **'Commitment to Subcontract'** form within the time period specified in the contract.

   i. Provide the following information along with department form DT1202:

      (1) The names, addresses, e-mail addresses, telephone numbers of DBE's contacted. The dates of both initial and follow-up contact. A printed copy of SBN solicitation is acceptable.

      (2) A description of information provided to the DBE's regarding the plans, specifications, and estimated quantities for portions of the work to be performed by that DBE.

      (3) Photocopies or electronic copies of all written solicitations to DBE's.

      (4) Documentation of each quote received from a DBE and, if rejected, the reason for that rejection.

      (5) Bidder attendance at any pre-solicitation or pre-bid meetings the department held to inform DBE's of participation opportunities available on the project.

f. The department's DBE Support Services Office is available by phone, email or in writing to request assistance in meeting the DBE goal:

DBE Support Services Office
6150 Fond du Lac Ave.
Milwaukee, WI 53218
Phone: 414-438-4583 / 608-266-6961
Fax: 414-438-5392
E-mail: DOTDBESupportServices@dot.wi.gov

6. Bidder's Appeal Process

a. A bidder can appeal the department's decision to deny the bidder's good faith waiver request. The bidder must provide written documentation refuting the specific reasons for rejection as stated in the department's rejection notice. The bidder may meet in person with the department if so requested. Failure to appeal within 7 calendar days after receiving the department's written notice of rejection of a good faith waiver request under constitutes a forfeiture of the bidder's right of appeal. If the bidder does not appeal, the department may declare the bid ineligible for execution.

b. The department will appoint a representative, who did not participate in the original determination, to assess the bidder's appeal. The department will issue a written decision within 7 calendar days after the bidder presents all written and oral testimony. In that written decision, the department will explain the basis for finding that the bidder did or did not meet the contract DBE goal or make an adequate good faith effort to meet the contract DBE goal. The department's decision is final. If the department finds that the bidder did not meet the contract DBE goal or did not make adequate efforts to meet the DBE goal, the department may declare the bid ineligible for execution.

7. Department's Criteria for DBE Participation

Department's DBE List

a. The department maintains a DBE list on the department's website

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/ucp-directory.xlsx

b. The DBE office is also available to assist at 414-438-4583 or 608-266-6961.

8. Counting DBE Participation

Assessing DBE Work

a. The department will only count the DBE usage towards the contract DBE goal if the DBE firm is certified as a DBE by one of the unified certification program agencies. If a firm becomes DBE certified before entering into a subcontract, the department may consider that DBE usage towards the contract goal. The department only counts the value of the work a DBE actually performs towards the DBE goal. The department assesses the DBE work as follows:

b. The department counts work performed by the DBE's own resources. The department includes the cost of materials and supplies the DBE obtains for the work. The department also includes the cost of equipment the DBE leases for the work. The department will not include the cost of materials, supplies, or equipment the DBE purchases or leases from the prime contractor or its affiliate, except the department will count non-project specific leases the DBE has in place before the work is advertised.

c. The department counts fees and commissions the DBE charges for providing a bona fide professional, technical, consultant, or managerial services. The department also counts fees and commissions the DBE charges for providing bonds or insurance. The department will only count costs the engineer deems reasonable based on experience or prevailing market rates.

d. If a DBE subcontracts work, the department counts the value of the subcontracted work only if the DBE's subcontractor is also a DBE.

e. The contractor shall maintain records and may be required to furnish periodic reports documenting its performance under this item.

f. It is the prime contractor's responsibility to determine the DBE's ability to perform the work with the use of the UCP directory.

9. Commercially Useful Function

a. The department counts expenditures of a DBE toward the DBE goal only if the DBE is performing a commercially useful function on that contract.
b. A DBE is performing a commercially useful function if the following conditions are met:
c. For contract work, the DBE is responsible for executing a distinct portion of the contract work and it is carrying out its responsibilities by actually performing, managing, and supervising that work.
d. For materials and supplies, the DBE is responsible for negotiating price, determining quality and quantity, ordering, and paying for those materials and supplies.

10. Trucking

All bidders are expected to adhere to the department's current trucking policy posted on the HCCI website

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/trucking-utilization-policy.pdf

11. Manufacturers and Suppliers

The department counts material and supplies a DBE provides under the contract. The department will give full credit toward the DBE goal if the DBE is a manufacturer of those materials or supplies. The department will give 60 percent credit toward the DBE goal if the DBE is merely a supplier of those materials or supplies. It is the bidder's responsibility to find out if the DBE is considered a supplier or a manufacturer before listing them on Commitment to Subcontract to DBE form DT1506.

12. DBE Prime

If the prime contractor is a DBE, the department will only count the work the contractor performs with its own forces, the work DBE subcontractors perform, and the work DBE suppliers or manufacturers perform.

13. Joint Venture

If a DBE performs as a participant in a joint venture, the department will only count that portion of the total dollar value of the contract equal to that portion of the work that the DBE performs with its own forces.

14. Mentor Protégé

a. If a DBE performs as a participant in a mentor protégé agreement, the department will credit the portion of the work performed by the DBE protégé firm
b. On every other project that the mentor protégé team identifies itself on.
c. For no more than one half of the total contracted DBE goal on any WisDOT project.

15. DBE Replacement

In the event a Prime Contractor needs to replace a DBE firm originally listed on the approved DBE Commitment Form DT1506, the Prime Contractor must comply with the department's DBE Replacement Policy located on the DBE page on the following web site:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/dbe/policy-statement.pdf

16. Changes to the approved DBE Commitment Form DT1506

If there are any changes to the approved Commitment to Subcontract to DBE Form DT1506, the prime contractor must submit a revised DBE Commitment Form DT1506 and relevant attachment A(s) to the DBE Programs Office within 5 business days.

17. Contract Modifications

When additional opportunity is available by contract modifications, the Prime Contractor shall utilize DBE Subcontractors that were committed to equal work items, in the original contract.

18. Payment

Costs for conforming to this Additional Special Provision (ASP) and any associated DBE requirements are incidental to the contract.

APPENDIX A
Sample Contractor Solicitation Letter Page 1
This sample is provided as a guide not a requirement

GFW SAMPLE MEMORANDUM

TO: DBE FIRMS

FROM: POTENTIAL PRIME CONTRACTOR OR MAJOR SUBCONTRACTOR

SUBJECT: **REQUEST FOR DBE QUOTES**

LET DATE & TIME

DATE: MONTH DAY YEAR

CC: DBE OFFICE ENGINEER

Our company is considering bidding on the projects indicated on the next page, as a prime and/or a subcontractor for the Wisconsin Department of Transportation Month- date -year Letting. Page 2 lists the projects and work items that we may subcontract for this letting. We are interested in obtaining subcontractor quotes for these projects and work categories. Also note that we are willing to accept quotes in areas we may be planning to perform ourselves as required by federal rules.

Please review page 2, respond whether you plan to quote, highlight the projects and work items you are interested in performing and return it via fax or email within 3 days. Plans, specifications and addenda are available through WisDOT at the DBE Support Services office or at the Highway Construction Contract Information (HCCI) site at http://roadwaystandards.dot.wi.gov/hcci/

Your quote should include all of the costs required to complete the items you propose to perform including labor, equipment, material, and related bonding or insurance. The quote should note items that you are DBE certified to perform, tied items, and any special terms. Page 2, with the indicated projects and items you plan to quote, should be used as a cover sheet for your quote.

Please make every effort to have your quotes into our office by time deadline the prior to the letting date. ***Make sure the correct letting date, project ID and proposal number, unit price and extension are included in your quote.*** We prefer quotes be sent via SBN but prime's alternative's are acceptable. Our office hours are include hours and days. Please call our office as soon as possible prior to the letting if you need information/clarification to prepare your quote at contact number.

If you wish to discuss or evaluate your quote in more detail, contact us after the contract is awarded. Status of the contract can be checked at WisDOT's HCCI site at http://roadwaystandards.dot.wi.gov/hcci/

All questions should be directed to:

Project Manager, John Doe,
Phone: (000) 123-4567
Email: Joe@joetheplumber.com
Fax: (000) 123- 4657

Sample Contractor Solicitation Letter Page 2

This sample is provided as a guide not a requirement

REQUEST FOR QUOTATION

Prime's Name: _____

Letting Date: _____

Project ID: _____

Please check all that apply

- ☐ Yes, we will be quoting on the projects and items listed below
- ☐ No, we are not interested in quoting on the letting or its items referenced below
- ☐ Please take our name off your monthly DBE contact list
- ☐ We have questions about quoting this letting. Please have some one contact me at this number

Prime Contractor 's Contact Person		DBE Contractor Contact Person	
Phone:		Phone	
Fax:		Fax	
Email:		Email	

Please circle the jobs and items you will be quoting below

Proposal No.	1	2	3	4	5	6	7
County							

WORK DESCRIPTION:

Clear and Grub	X		X	X		X	X
Dump Truck Hauling	X		X	X		X	X
Curb & Gutter/Sidewalk, Etc.	X		X	X		X	X
Erosion Control Items	X		X	X		X	X
Signs and Posts/Markers	X		X	X		X	X
Traffic Control		X	X	X		X	X
Electrical Work/Traffic Signals		X	X	X		X	
Pavement Marking		X	X	X	X	X	X
Sawing Pavement		X	X	X	X	X	X
QMP, Base	X	X		X	X	X	X
Pipe Underdrain	X			X			
Beam Guard				X	X	X	X
Concrete Staining							X
Trees/Shrubs	X						X

Again please make every effort to have your quotes into our office by time deadline prior to the letting date.

We prefer quotes be sent via SBN but prime's preferred alternative's are acceptable.

If there are further questions please direct them to the prime contractor's contact person at phone number.

APPENDIX B
BEST PRACTICES FOR PRIME CONTRACTOR & DBE SUBCONTRACTOR GOOD FAITH EFFORT

This list is not a set of requirements; it is a list of potential strategies

Primes

- Prime contractor open houses inviting DBE firms to see the bid "war room" or providing technical assistance
- Participate in speed networking and mosaic exercises as arranged by DBE office
- Host information sessions not directly associated with a bid letting;
- Participate in a formal mentor protégé or joint venture with a DBE firm
- Participate in WisDOT advisory committees i.e. TRANSAC, or Mega Project committee meetings
- Facilitate a small group DBE 'training session' Clarifying how your firm prepares for bid letting, evaluates subcontractors, preferred qualifications and communication methods
- Encourage subcontractors to solicit and highlight DBE participation in their quotes to you
- Quality of communication, not quantity creates the best results. Contractors should do as thorough a job as possible in communicating with DBE firms before the bid and provide any assistance requested to assure best possible bid.

DBE

- DBE firms should contact primes as soon as possible with questions regarding their quotes or bid; seven days prior is optimal.
- Continually check for contract addendums on the HCCI website through the Thursday prior to letting to stay abreast of changes.
- Review the status of contracts on the HCCI website reviewing the 'apparent low bidder' list, and bid tabs at a minimum.
- Prepare a portfolio or list of related projects and prime and supplier references; be sure to note transportation-related projects of similar size and scope, firm expertise and staffing.
- Participate in DBE office assessment programs
- Participate on advisory and mega-project committees
- Sign up to receive the DBE Contracting Update
- Consider membership in relevant industry or contractor organizations
- Active participation is a must. Quote as many projects as you can reasonably work on; quoting the primes and bidding as a prime with the department are the only ways to get work.

APPENDIX C
Types of Efforts considered in determining GFE
This list represents concepts being assessed; analysis requires additional steps

1. Whether the contractor attended any pre-solicitation or pre-bid meetings that were scheduled by WisDOT to inform DBEs of contracting and subcontracting opportunities;
2. Whether the contractor provided written notice to a reasonable number of specific DBEs that their interest in the contract was being solicited, in sufficient time to allow the DBEs to participate effectively;
3. Whether the contractor followed up initial solicitations of interest by contacting DBEs to determine if the DBEs were interested; returned the phone calls of interested DBE firms.
4. Whether the contractor selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the DBE goal;
5. Whether the contractor provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
6. Whether the contractor negotiated in good faith with interested DBEs, not rejected DBEs as unqualified without sound reasons based on a thorough investigation of their capabilities;
7. Whether the contractor made efforts to assist interested DBEs in being more competitive.
8. Whether the contractor effectively used the services of available minority community organizations: minority contractors groups, local, state, and Federal minority business assistance offices, and other organizations that provide assistance to small businesses and DBE firms.
9. Whether Prime used CRCS to identify DBE who specialize in relevant work areas.
10. Whether the contractor used available resources including contacting the DBE office, using WisDOT's website
11. Whether the contractor returned calls of firms expressing interest in a timely manner.

APPENDIX D
Good Faith Effort Evaluation Guidance
Excerpt from Appendix A of 49 CFR Part 26

APPENDIX A TO PART 26 -- GUIDANCE CONCERNING GOOD FAITH EFFORTS

I. When, as a recipient, you establish a contract goal on a DOT assisted contract, a bidder must, in order to be responsible and/or responsive, make good faith efforts to meet the goal. The bidder can meet this requirement in either of two ways. First, the bidder can meet the goal, documenting commitments for participation by DBE firms sufficient for this purpose. Second, even if it doesn't meet the goal, the bidder can document adequate good faith efforts. This means that the bidder must show that it took all necessary and reasonable steps to achieve a DBE goal or other requirement of this part which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not fully successful.

II. In any situation in which you have established a contract goal, part 26 requires you to use the good faith efforts mechanism of this part. As a recipient, it is up to you to make a fair and reasonable judgment whether a bidder that did not meet the goal made adequate good faith efforts. It is important for you to consider the quality, quantity, and intensity of the different kinds of efforts that the bidder has made. The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the DBE contract goal. Mere pro forma efforts are not good faith efforts to meet the DBE contract requirements. We emphasize, however, that your determination concerning the sufficiency of the firm's good faith efforts is a judgment call: meeting quantitative formulas is not required.

III. The Department also strongly cautions you against requiring that a bidder meet a contract goal (i.e., obtain a specified amount of DBE participation) in order to be awarded a contract, even though the bidder makes an adequate good faith efforts showing. This rule specifically prohibits you from ignoring bona fide good faith efforts.

IV. The following is a list of types of actions which you should consider as part of the bidder's good faith efforts to obtain DBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

B. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.

C. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

D. (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Prime contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

E. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non solicitation of bids in the contractor's efforts to meet the project goal.

F. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or contractor.

G. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

H. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

V. In determining whether a bidder has made good faith efforts, you may take into account the performance of other bidders in meeting the contract. For example, when the apparent successful bidder fails to meet the contract goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts, the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the goal, but meets or exceeds the average DBE participation obtained by other bidders, you may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts.

Appendix E
Small Business Network [SBN] Overview

The Small Business Network is a part of the Bid Express® service that was created to ensure that prime bidders have a centralized online location to find subs - including small and disadvantaged business enterprises (DBEs). It is available for prime bidders to use as part of their Basic Service subscription. Within the Small Business Network, **Prime Contractors** can:

1. Easily select proposals, work types and items:
    a. After adding applicable work types, select items that you wish to quote. Enter the sub-quote quantities and add comments, if desired. Adding or removing items and work types can be done quickly. If needed, you can save the sub-quote for completion at a later time.
2. Create sub-quotes for the subcontracting community:
    a. Create sub-quotes with ease using the intuitive sub-quote creator. In seven short steps, you can rapidly create a custom sub-quote directed to all subcontractors that bid on the applicable work types. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
    b. Create a sub-quote to send to subcontractors or suppliers that lists the items in a proposal that you want quoted
    c. Create an unlimited number of sub-quotes for items you want quoted, and optionally mark them as a DBE-preferred request
    d. Add attachments to sub-quotes
3. View sub-quote requests & responses:
    a. After logging into the Bid Express service, you can quickly review all of your sub-quote requests and all unsolicited sub-quote requests from subcontractors. To simplify the Small Business Network home screen, sub-quote requests can be hidden with one click if they are not applicable.
    b. View or receive unsolicited sub-quotes that subcontractors have posted, complete with terms, conditions and pricing
4. View Record of Subcontractor Outreach Effort:
    a. For each sub-quote produced, a *Record of Subcontractor Outreach Effort* is generated that shows the response statistics for a particular sub-quote. If accepted by the letting agency, this report may serve as proof of a "Good Faith" effort in reaching out to the DBE community.
    b. Easily locate pre-qualified and certified small and disadvantaged businesses
    c. Advertise to small and disadvantaged businesses more efficiently and cost effectively
    d. Document your interactions with subs/DBEs by producing an Outreach Report (may be accepted as proof of DBE outreach at the discretion of each agency)

The Small Business Network is a part of the Bid Express® service that was created to ensure that small businesses have a centralized area to access information about upcoming projects. It can help small businesses learn more about opportunities, compete more effectively, network with other contractors and subcontractors, and win more jobs.

1. View and reply to sub-quote requests from primes:
    a. After logging into the Bid Express service, you can quickly review all incoming sub-quote requests and all unsolicited sub-quotes created by your company. Receive notifications by selected work type. To simplify on the Small Business Network home screen, sub-quote requests can be filtered by work types relevant to your interests, or hidden with one click if they are not applicable.
2. Select items when responding to sub-quote requests from primes:
    a. You have the freedom to choose and price any number of items when responding to a sub-quote request. Quantities can be modified, and per-item comments are also available.
    b. View requests for sub-quotes for work that primes have posted for projects they are bidding, add your pricing, terms, and conditions, and submit completed sub-quotes to the requesting primes
    c. Add attachments to a sub-quote
3. Create and send unsolicited sub-quotes to specific contractors:
    a. Create unsolicited sub-quotes with ease using the intuitive sub-quote creator. In eight short steps, you can rapidly create a custom sub-quote directed at any number of specific vendors of your choosing. Steps include: provide contact information and sub-quote expiration date, select letting and proposal, add work types and items, specify terms and conditions, upload attachments, and select vendors.
4. Easily select and price items for unsolicited sub-quotes:
    a. After adding applicable work types, select items that you wish to quote. The extended price calculates automatically, cutting out costly calculation errors. Comments can be provided on an per-item basis as well.
    b. Create an unsolicited sub-quote that lists the items from a proposal that you want to quote, include pricing, terms and conditions, and send it to selected prime/plan holder
    c. Add attachments to a sub-quote
    d. Add unsolicited work items to sub-quotes that you are responding to
5. Easy Access to Valuable Information
    a. Receive a confirmation that your sub-quote was opened by a prime
    b. View Bid Tab Analysis data from past bids, including the high, average and low prices of items.
    c. View important notices and publications from DOT targeted to small and disadvantaged businesses
6. Accessing Small Business Network for WisDOT contracting opportunities
    a. If you are a contractor not yet subscribing to the Bid Express service, go to **www.bidx.com** and select "Order Bid Express." The Small Business Network is a part of the Bid Express Basic Service.
    b. DBE firms can request a Bid Express Small Business Network Account at no cost by calling 414-438-4588

ADDITIONAL SPECIAL PROVISION 4

Payment to First-Tier Subcontractors

Within 10 calendar days of receiving a progress payment for work completed by a subcontractor, pay the subcontractor for that work. The prime contractor may withhold payment to a subcontractor if, within 10 calendar days of receipt of that progress payment, the prime contractor provides written notification to the subcontractor and the department documenting "just cause" for withholding payment.

The prime contractor may also withhold routine retainage from payments due subcontractors.

Payment to Lower-Tier Subcontractors

Ensure that subcontracting agreements at all tiers provide prompt payment rights to lower-tier subcontractors that parallel those granted first-tier subcontractors in this provision.

Release of Routine Retainage

After granting substantial completion the department may reduce the routine retainage withheld from the prime contractor to 75 percent of the original total amount retained.

When the Department sends the semi-final estimate the department may reduce the routine retainage withheld from the prime contractor to 10 percent of the original total amount retained.

Within 30 calendar days of receiving the semi-final estimate from the department, submit written certification that subcontractors at all tiers are paid in full for acceptably completed work and that no routine retainage is being withheld. The department will pay the prime contractor in full and reduce the routine retainage withheld from the prime contractor to zero when the department approves the final estimate.

This special provision does not limit the right of the department, prime contractor, or subcontractors at any tier to withhold payment for work not acceptably completed or work subject to an unresolved contract dispute.

ADDITIONAL SPECIAL PROVISION 6
ASP 6 - Modifications to the standard specifications

Make the following revisions to the standard specifications:

440.3.5.2 Corrective Actions for Localized Roughness

Replace paragraph two with the following effective with the September 2016 letting:

(2) The engineer will not direct corrective action or assess a pay reduction for an area of localized roughness without physically riding that work. The engineer will not direct corrective action on bridges without authorization from the department's bureau of structures.

450.3.2.1 General

Replace the entire text with the following effective with the June 2016 letting:

450.3.2.1.1 Preparation and Paving Operations

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 36 F for upper layers or 32 F for lower layers unless the engineer allows in writing. The contractor should place HMA pavement for projects in the northern asphalt zone between May 1 and October 15 inclusive and for projects in the southern asphalt zone between April 15 and November 1 inclusive. CMM 4-53 figure 2 defines asphalt zones. Notify the engineer at least one business day before paving.

(2) Unless the contract specifies otherwise, conform to the following:

- Keep the road open to all traffic during construction.
- Prepare the existing foundation for treatment as specified in 211.
- Incorporate loose roadbed aggregate as a part of preparing the foundation, in shoulder construction, or dispose of as the engineer approves.

(3) Place asphaltic mixture only on a prepared, firm, and compacted base, foundation layer, or existing pavement substantially surface-dry and free of loose and foreign material. Do not place over frozen subgrade or base, or where the roadbed is unstable.

450.3.2.1.2 Cold Weather Paving

450.3.2.1.2.1 General

(1) Conform to these cold weather paving provisions for work performed under the following:

- The 460 HMA Pavement bid items.
- The 465 Asphaltic Surface bid items.
- Special provisions that require placing mixture conforming to the contract requirements under 460 for HMA pavement or under 465 for asphaltic surface.

450.3.2.1.2.2 Cold Weather Paving Plan

(1) Submit a written cold weather paving plan to the engineer at the preconstruction meeting. In that plan outline material, operational, and equipment changes for paving when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F. Include the following:

- Use a department-accepted HMA mix design that incorporates a warm mix additive from the department's approved products list. Do not use a foaming process that introduces water into the mix.
- Identify the warm mix additive and dosage rate.
- Identify modifications to the compaction process and when to use them.

(2) Engineer written acceptance is required for the cold weather paving plan. Engineer acceptance of the plan does not relieve the contractor of responsibility for the quality of HMA pavement placed in cold weather except as specified in 450.5.2(3).

450.3.2.1.2.3 Cold Weather Paving Operations

(1) Do not place asphaltic mixture when the air temperature approximately 3 feet above grade, in shade, and away from artificial heat sources is less than 40 F unless a valid engineer-accepted cold weather paving plan is in effect.

(2) If the national weather service forecast for the construction area predicts ambient air temperature less than 40 F at the projected time of paving within the next 24 hours, confirm or submit revisions to the cold weather paving plan for engineer validation. Update the plan as required to accommodate the conditions anticipated for the next day's operations. Upon validation of the plan, the engineer will allow paving for the next day. Once in effect, pave conforming to the engineer-accepted cold weather paving plan for the balance of that work day or shift regardless of the temperature at the time of paving.

450.4 Measurement

Add the following as paragraph three effective with the June 2016 letting:

(3) The department will measure HMA Cold Weather Paving by the ton of HMA mixture placed conforming to an engineer-accepted cold weather paving plan.

450.5 Payment

Replace the entire text with the following effective with the June 2016 letting:

450.5.1 General

(1) All costs of furnishing, maintaining, and operating the truck scale or other weighing equipment and furnishing the weigh tickets are incidental to the contract.

(2) Nonconforming material allowed to remain in place is subject to price adjustment under 105.3.2.

(3) Full-depth sawing to remove integrally placed safety edge where not required is incidental to the contract.

(4) The contractor is responsible for the quality of HMA placed in cold weather.

450.5.2 Cold Weather Paving

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
450.4000	HMA Cold Weather Paving	TON

(2) Payment for HMA Cold Weather Paving is full compensation for additional materials and equipment specified for cold weather paving under 450.3.2.1.2 including costs for preparing, administering, and following the contractor's cold weather paving plan. The department will not pay for HMA Cold Weather Paving for HMA placed as follows:

- If the lot density is less than the minimum specified in table 460-3 for mixture placed under 460.
- On days when the department is assessing liquidated damages.

(3) If because of an excusable compensable delay under 108.10.3, the engineer directs the contractor to pave when the temperature is less than 36 F for the upper layer or less than 32 F for lower layers, the department:

- Will relieve the contractor of responsibility for damage and defects the engineer attributes to cold weather paving.
- Will not assess disincentives for density or ride.

(4) If HMA pavement is placed under 450.3.2.1.2 and the HMA Cold Weather Paving bid item is not in the contract, the department will pay for the additional costs specified in 450.5.2(2) as extra work. The department will pay separately for providing HMA pavement and HMA surface under 460.5, 465.5, and the contract special provisions.

460.3.4 Cold Weather Paving

Delete the entire subsection effective with the June 2016 letting:

460.5.1 General

Replace the entire text with the following effective with the June 2016 letting:

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT

460.5000 - 5999	HMA Pavement (gradation) LT (binder)(designation)	TON
460.6000 - 6999	HMA Pavement (gradation) MT (binder)(designation)	TON
460.7000 - 7999	HMA Pavement (gradation) HT (binder)(designation)	TON
460.8000 - 8999	HMA Pavement (gradation) SMA (binder)(designation)	TON
460.2000	Incentive Density HMA Pavement	DOL

460.5.2.2 Disincentive for HMA Pavement Density

Replace paragraph two with the following effective with the June 2016 letting:

(2) The department will not assess density disincentives for pavement placed in cold weather because of a department-caused delay as specified in 450.5.2(3).

460.5.2.4 Cold Weather Paving

Delete the entire subsection effective with the June 2016 letting:

501.2.6 Fly Ash

Replace paragraph four with the following effective with the July 2016 letting:

(4) Use only one source of fly ash for a bid item of work under the contract, unless the engineer directs or allows otherwise in writing.

502.3.7.8 Floors

Replace paragraph sixteen with the following effective with the September 2016 letting:

(16) The finished bridge floor shall conform to the surface test specified in 415.3.10. The engineer will not direct corrective grinding without authorization from the department's bureau of structures.

550.5.2 Piling

Add the following as paragraph three effective with the December 2015 letting:

(3) The department will not entertain a change order request for a differing site condition under 104.2.2.2 or for a quantity change under 104.2.2.4.3 for the Piling bid items. Instead the department will adjust pay under the Piling Quantity Variation administrative item if the total driven length of each size is less than 85 percent of, or more than 115 percent of the contract quantity as follows:

Percent of Contract Length Driven	Pay Adjustment
< 85	(85% contract length - driven length) x 20% unit price
> 115	(driven length - 115% contract length) x 5% unit price

643.2.1 General

Replace paragraph two with the following effective with the December 2015 letting:

(2) Use reflective sheeting from the department's approved products list on barricades, drums, and flexible tubular marker posts.

715.3.1.2.1 General

Replace paragraph one with the following effective with the July 2016 letting:

(1) Designate the location and size of all lots before placing concrete. Ensure that no lot contains concrete of more than one mix design or placement method defined within 715.3.1.2 as follows:

Mix design change A modification to the mix requiring the engineer's approval under 710.4(5).

For paving mixes, a source change under item 1 of 710.4(5) for fly ash of the same class that does not require a modification under items 2 through 4 of 710.4(5) does not constitute a mix design change.

Placement method Either slip-formed, not slip-formed, or placed under water.

Errata

Make the following corrections to the standard specifications:

460.2.7 HMA Mixture Design - TABLE 460-2 MIXTURE REQUIREMENTS

Correct errata in the Fractured Faces row of table 460-2 to reference ASTM D5821.

Fractured Faces (ASTM D5821) (one face/2 face, % by count)	60 / __	65 / __	75 / 60	85 / 80	98 / 90	100/100	100/90

Correct errata in footnote two of table 460-2 to reference AASHTO M323.

[2] For a gradation that passes below the boundaries of the caution zone (ref. AASHTO M323), the dust to binder ratio limits are 0.6 - 1.6.

641.2.9 Overhead Sign Supports

Correct errata adding back accidentally deleted paragraphs one through three.

(1) Provide commercially fabricated overhead sign supports conforming to AASHTO design and fabrication standards for structural supports for highway signs, luminaires, and traffic signals. Use a design life of 50 years with a wind importance factor of 1.00. Design to withstand a 3 second gust wind speed of 90 mph. Do not use the methods of appendix C of those AASHTO standards.

(2) Design structures, listed as applicable structure types in the AASHTO standards, to the fatigue category criteria as follows:

1. Structures carrying variable message signs:
   - Category I criteria for structures over all roadway types.
2. Structures carrying type II or III signs:
   - Category I criteria for structures used over highways and free flow ramps.
   - Category II criteria for structures with arms greater than 30 feet used over local roads and city streets.
   - Category III criteria for structures with arms 30 feet or less used over local roads and city streets.

(3) Use the posted speed limit of the roadway beneath the structure for truck-induced gusts.

(4) Submit shop drawings identified by structure number, design computations, and material specifications, to the engineer before erecting sign supports. Provide tightening procedures for mast arm or luminaire arm to pole shaft connections on the shop drawings. Have a professional engineer registered in the state of Wisconsin sign, seal, and date the shop drawings and certify that the design conforms to AASHTO standards and the contract.

(5) Provide steel pole shafts and mast arms zinc coated according to ASTM A123. Provide tapered pole and arm shafts with a minimum taper of 0.14 inch per foot for single-member vertical and single-member horizontal structure components. Provide bolts and other hardware conforming to 641.2.2.

ADDITIONAL SPECIAL PROVISION 7

A. Reporting 1st Tier and DBE Payments During Construction

1. Comply with reporting requirements specified in the department's Civil Rights Compliance, Contractor's User Manual, Sublets and Payments.
2. Report payments to all DBE firms within 10 calendar days of receipt of a progress payment by the department or a contractor for work performed, materials furnished, or materials stockpiled by a DBE firm. Report the payment as specified in A(1) for all work satisfactorily performed and for all materials furnished or stockpiled.
3. Report payments to all first tier subcontractor relationships within 10 calendar days of receipt of a progress payment by the department for work performed. Report the payment as specified in A(1) for all work satisfactorily performed.
4. All tiers shall report payments as necessary to comply with the DBE payment requirement as specified in A(2).
5. Require all first tier relationships, DBE firms and all other tier relationships necessary to comply with the DBE payment requirement in receipt of a progress payment by contractor to acknowledge receipt of payment as specified in A(1), (2), (3) and (4).
6. All agreements made by a contractor shall include the provisions in A(1), (2), (3), (4) and (5), and shall be binding on all first tier subcontractor relationships and all contractors and subcontractors utilizing DBE firms on the project.

B. Costs for conforming to this special provision are incidental to the contract.

ADDITIONAL SPECIAL PROVISION 9
Electronic Certified Payroll Submittal

(1) Use the department's Civil Rights Compliance System (CRCS) to submit certified payrolls electronically. Details are available online through the department's highway construction contractor information (HCCI) site on the Labor, Wages, and EEO Information page at:

http://wisconsindot.gov/Pages/doing-bus/civil-rights/labornwage/default.aspx

(2) Ensure that all tiers of subcontractors, as well as all trucking firms, submit their weekly certified payrolls electronically through CRCS. These payrolls are due within seven calendar days following the close of the payroll period. Every firm providing physical labor towards completing the project is a subcontractor under this special provision.

(3) Upon receipt of contract execution, promptly make all affected firms aware of the requirements under this special provision and arrange for them to receive CRCS training as they are about to begin payrolls. The department will provide training either in a classroom setting at one of our regional offices or by telephone. Contact Tess Mulrooney at 608-267-4489 to schedule the training.

(4) The department will reject all paper submittals of forms DT-1816 and DT-1929 for information required under this special provision. All costs for conforming to this special provision are incidental to the contract.

(5) Firms wishing to export payroll data from their computer system into CRCS should have their payroll coordinator send several sample electronic files to Tess two months before a payroll needs to be submitted. Not every contractor's payroll system is capable of producing export files. For details, see pages 17-22 of the CRCS System Background Information manual available online on the Labor, Wages, and EEO Information page at:

http://wisconsindot.gov/Documents/doing-bus/civil-rights/labornwage/crcs-payroll-manual.pdf

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under

this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are

applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor

will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or

will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;
(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the

department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Non-discrimination Provisions

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. Compliance with Regulations: The contractor (hereinafter includes consultants) will comply with the Acts and the Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Non-discrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Non-discrimination on the grounds of race, color, or national origin.

4. Information and Reports: The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the Federal Highway Administration to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the Recipient or the Federal Highway Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the contractor under the contract until the contractor complies; and/or
b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the Recipient or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

Pertinent Non-Discrimination Authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

SEPTEMBER 2002

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Employment Practices" and "Equal Opportunity Clause" set forth in the Required Contract Provisions, FHWA 1273.

2. The goals and timetables for minority and female participation expressed in percentage terms for the contractor's aggregate work force in each trade, on all construction work in the covered area, are as follows:

Goals for Minority Participation for Each Trade:

County	%	County	%	County	%
Adams	1.7	Iowa	1.7	Polk	2.2
Ashland	1.2	Iron	1.2	Portage	0.6
Barron	0.6	Jackson	0.6	Price	0.6
Bayfield	1.2	Jefferson	7.0	Racine	8.4
Brown	1.3	Juneau	0.6	Richland	1.7
Buffalo	0.6	Kenosha	3.0	Rock	3.1
Burnett	2.2	Kewaunee	1.0	Rusk	0.6
Calumet	0.9	La Crosse	0.9	St. Croix	2.9
Chippewa	0.5	Lafayette	0.5	Sauk	1.7
Clark	0.6	Langlade	0.6	Sawyer	0.6
Columbia	1.7	Lincoln	0.6	Shawano	1.0
Crawford	0.5	Manitowoc	1.0	Sheboygan	7.0
Dane	2.2	Marathon	0.6	Taylor	0.6
Dodge	7.0	Marinette	1.0	Trempealeau	0.6
Door	1.0	Marquette	1.7	Vernon	0.6
Douglas	1.0	Menominee	1.0	Vilas	0.6
Dunn	0.6	Milwaukee	8.0	Walworth	7.0
Eau Claire	0.5	Monroe	0.6	Washburn	0.6
Florence	1.0	Oconto	1.0	Washington	8.0
Fond du Lac	1.0	Oneida	0.6	Waukesha	8.0
Forest	1.0	Outagamie	0.9	Waupaca	1.0
Grant	0.5	Ozaukee	8.0	Waushara	1.0
Green	1.7	Pepin	0.6	Winnebago	0.9
Green Lake	1.0	Pierce	2.2	Wood	0.6

Goals for female participation for each trade: 6.9%

These goals are applicable to all the contractor's construction work, (whether or not it is federal or federally assisted), performed in the covered area. If the contractor performs construction work in the geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The contractor's compliance with the Executive Order and the Regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the contractor's goals shall be a violation of the contract, the Executive Order and the Regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of $10,000.00 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

   As referred to in this section, the Director means:

   Director
   Office of Federal Contract Compliance Programs
   Ruess Federal Plaza
   310 W. Wisconsin Ave., Suite 1115
   Milwaukee, WI 53202

   The "Employer Identification Number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

4. As used in this notice, and in the contract resulting from solicitation, the "covered area" is the county(ies) in Wisconsin to which this proposal applies.

APRIL 2013

ADDITIONAL FEDERAL-AID PROVISIONS

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m., Eastern Time. Anyone with knowledge of possible bid rigging, bidding collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

Effective August 2015 letting

BUY AMERICA PROVISION

All steel and iron materials permanently incorporated in this project shall be domestic products and all manufacturing and coating processes for these materials from smelting forward in the manufacturing process must have occurred within the United States. Coating includes epoxy coating, galvanizing, painting and any other coating that protects or enhances the value of a material subject to the requirements of Buy America. The exemption of this requirement is the minimal use of foreign materials if the total cost of such material permanently incorporated in the product does not exceed one-tenth of one percent (1/10 of 1%) of the total contract cost or $2,500.00, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the subject products as they are delivered to the project. The contractor shall take actions and provide documentation conforming to CMM 2-28.5 to ensure compliance with this “Buy America” provision.

http://wisconsindot.gov/rdwy/cmm/cm-02-28.pdf

Upon completion of the project certify to the engineer, in writing using department form WS4567, that all steel, iron, and coating processes for steel or iron incorporated into the contract work conform to these "Buy America" provisions. Attach a list of exemptions and their associated costs to the certification form. Department form WS4567 is available at:

http://wisconsindot.gov/hcciDocs/contracting-info/ws4567.doc

Effective February 2016 letting

Cargo Preference Act Requirement

All Federal-aid projects shall comply with 46 CFR 381.7 (a) – (b) as follows:

(a) *Agreement Clauses.* "Use of United States-flag vessels:"

(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) *Contractor and Subcontractor Clauses.* "Use of United States-flag vessels: The contractor agrees—"

(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.

Effective with September 2004 Letting

WISCONSIN DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS AND TRANSPORTATION FACILITIES

SUPPLEMENTAL REQUIRED CONTRACT PROVISIONS

I. WAGE RATES, HOURS OF LABOR AND PAYMENT OF WAGES

The schedule of "Minimum Wage Rates" attached hereto and made a part hereof furnishes the prevailing wage rates that have been determined pursuant to Section 103.50 of the Wisconsin Statutes. These wage rates are the minimum required to be paid to the various laborers, workers, mechanics and truck drivers employed by contractors and subcontractors on the construction work embraced by the contract and subject to prevailing hours and wages under Section 103.50, Stats. If necessary to employ laborers, workers, mechanics or truck drivers whose classification is not listed on the schedule, they shall be paid at rates conformable to those listed for similar classifications. Apprentices shall be paid at rates not less than those prescribed in their state indenture contacts.

While the wage rates shown are the minimum rates required by the contract to be paid during its life, this in not a representation that labor can be obtained at these rates. It is the responsibility of bidders to inform themselves as to the local labor conditions and prospective changes or adjustments of wage rates. No increase in the contract price shall be allowed or authorized on account of the payment of wage rates in excess of those listed herein.

Pursuant to Section 103.50 of the Wisconsin Statutes, the prevailing hours of labor have been determined to be up to 10 hours per day and 40 hours per calendar week Monday through Friday. If any laborer, worker, mechanic or truck driver is permitted or required to work more than the prevailing number of hours per day or per calendar week on this contract, they shall be paid for all hours in excess of the prevailing hours at a rate of at least one and one-half (1 1/2) times their hourly rate of pay. All work on Saturday, Sunday and the following holidays is to be paid at time and a half: (1) January 1, (2) the last Monday in May, (3) July 4, (4) the first Monday in September, (5) the fourth Thursday in November, (6) December 25, (7) the day before if January 1, July 4 or December 25 falls on a Saturday and (8) the day following if January 1, July 4 or December 25 falls on a Sunday.

All laborers, workers, mechanics and truck drivers shall be paid unconditionally not less often than once a week. Persons who own and operate their own trucks must receive the prevailing truck driver rate for the applicable type of truck (i.e. 2 axle, 3 or more axle, articulated, eculid or dumptor) he or she operates, plus an agreed upon amount for the use of his or her truck. Every owner-operator MUST be paid separately for their driving and for the use of their truck.

For those projects subject to the requirements of the Davis-Bacon Act, the Secretary of Labor will also have determined "Minimum Wage Rates" for work to be performed under the contract. These rates are, for all or most of the labor, worker, mechanic or truck driver classifications, identical to those established under Section 103.50 of the Wisconsin Statutes. In the event the rates are not identical, the higher of the two rates will govern.

II. PAYROLL REQUIREMENTS

All contractors and subcontractors must submit weekly Certified Payrolls and Compliance Statement verifying that all laborers, workers, mechanics and truck drivers working on the project have been paid the prevailing wage rates for all work performed under the contract required by Section 103.50 of the Wisconsin Statutes.

III. POSTINGS AT THE SITE OF THE WORK

In addition to the required postings furnished by the Department, the contractor shall post the following in at least one conspicuous place at the site of work:

a. "NOTICE TO EMPLOYEES," which provides information required to be posted by the provisions of Section 103.50 of the Wisconsin Statutes.

b. A copy of the State of Wisconsin Minimum Wages Rates. (Four pages.)

c. A copy of the contractor's Equal Employment Opportunity Policy.

d. On any project involving federal aid, in addition to the furnished postings, the contractor shall post a copy of the "Davis-Bacon Act, Minimum Wage Rates". (Three pages.)

IV. WAGE RATE REDISTRIBUTION

The amount specified as the hourly basic rate of pay and the amount(s) specified as the fringe benefit contribution(s), for all classes of laborers, workers, mechanics or truck drivers may be redistributed, when necessary, to conform to those specified in any applicable collective bargaining agreement, provided that both parties to such agreement

request and receive the approval for any such redistribution from both the Department of Transportation and the Department of Workforce Development prior to the implementation of such redistribution.

V. ADDITIONAL CLASSIFICATIONS

Any unlisted laborer or mechanic classification that is needed to perform work on this project, and is not included within the scope of any of the classifications listed in the application prevailing wage rate determination, may be added after award only if all of the following criteria have been met:

1. The affected employer(s) must make a written request to WisDOT Central Office to utilize the unlisted classification on this project.

2. The request must indicate the scope of the work to be performed by the unlisted classification and must indicate the proposed wage/fringe benefit package that the unlisted classification is to receive.

3. The work to be performed by the unlisted classification must not be performed by a classification that is included in the applicable prevailing wage rate determination.

4. The unlisted classification must be commonly employed in the area where the project is located.

5. The proposed wage/fringe benefit package must bear a reasonable relationship to those set forth in the applicable prevailing wage rate determination.

6. The request should be made prior to the actual performance of the work by the unlisted classification.

7. DWD must approve the use of the unlisted classification and the proposed wage/fringe benefit package. USDOL also must approve the use of the unlisted classification and the proposed wage/fringe benefit package on federal aid projects.

8. WisDOT and DWD may amend the proposed wage/fringe benefit package, as deemed necessary, and may set forth specific employment ratios and scope of work requirements in the approval document.

The approved wage/fringe benefit package shall be paid to all laborers, workers, mechanics or truck drivers performing work within the scope of that performed by the unlisted classification, from the first day on which such work is performed. In the event that work is performed by the unlisted classification prior to approval, the wage/fringe benefit package to be paid for such work must be in conformance with the wage/fringe

benefit package approved for such work. Under this arrangement a retroactive adjustment in wages and/or fringe benefits may be required to be made to the affected laborers, workers, mechanics or truck drivers by the affected employer(s).

ANNUAL PREVAILING WAGE RATE DETERMINATION
FOR ALL STATE HIGHWAY PROJECTS
LA CROSSE COUNTY

Compiled by the State of Wisconsin - Department of Workforce Development
for the Department of Transportation
Pursuant to s. 103.50, Stats.
Issued on May 1, 2016

CLASSIFICATION: Contractors are required to call the Department of Workforce Development if there are any questions reqarding the proper trade or classification to be used for any worker on a public works project.

OVERTIME: Time and one-half must be paid for all hours worked over 10 hours per day and 40 hours per calendar week and for all hours worked on Saturday, Sunday and the following six (6) holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25; the day before if January 1, July 4 or December 25 falls on a Saturday; the day following if January 1, July 4 or December 25 falls on a Sunday.

FUTURE INCREASE: If indicated for a specific trade or occupation, the full amount of such increase MUST be added to the "TOTAL" indicated for such trade or occupation on the date(s) such increase(s) becomes effective.

PREMIUM PAY: If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.

SUBJOURNEY: Wage rates may be available for some of the classifications indicated below. Any employer that desires to use any subjourney classification on a project MUST request the applicable wage rate from the Department of Workforce Development PRIOR to the date such classification is used on such project. Form ERD-10880 is available for this purpose and can be obtained by writing to the Department of Workforce Development, Equal Rights Division, P.O. Box 8928, Madison, WI 53708.

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Bricklayer, Blocklayer or Stonemason	31.55	18.52	50.07
Carpenter	33.02	17.12	50.14
Future Increase(s): Add $1.42/hr on 6/1/2016. Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Cement Finisher	34.64	19.64	54.28
Future Increase(s): Add $1.75 on 6/1/16. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			
Electrician	31.21	18.96	50.17
Future Increase(s): Add $1.15 on 6/1/16 Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Fence Erector	35.62	0.00	35.62
Ironworker	32.50	20.58	53.08
Line Constructor (Electrical)	38.59	27.20	65.79
Painter	29.87	18.79	48.66
Pavement Marking Operator	30.00	18.27	48.27
Piledriver	30.11	21.09	51.20
Roofer or Waterproofer	30.40	2.23	32.63
Teledata Technician or Installer	17.50	5.57	23.07
Tuckpointer, Caulker or Cleaner	31.12	18.69	49.81
Underwater Diver (Except on Great Lakes)	36.74	16.00	52.74

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	36.73	15.92	52.65
Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	32.65	16.12	48.77
Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	28.57	13.71	42.28
Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.53	13.09	39.62
Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.75	12.97	34.72
TRUCK DRIVERS			
Single Axle or Two Axle	36.72	21.15	57.87
Three or More Axle	25.78	18.96	44.74
Premium Pay: DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.			
Articulated, Euclid, Dumptor, Off Road Material Hauler	30.82	21.85	52.67
Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017.			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.			
Pavement Marking Vehicle	23.82	17.72	41.54
Shadow or Pilot Vehicle	25.28	18.31	43.59
Truck Mechanic	25.28	18.31	43.59
LABORERS			
General Laborer	30.67	15.65	46.32
Future Increase(s): Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017			
Premium Pay: Add $.10/hr for topman, air tool operator, vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add $.15/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add $.20/hr for blaster and powderman; Add $.25/hr for bottomman; Add $.35/hr for line and grade specialist; Add $.45/hr for pipelayer. DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Asbestos Abatement Worker	24.92	15.12	40.04
Landscaper	30.67	15.65	46.32
Future Increase(s): Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).			
Flagperson or Traffic Control Person	27.30	15.65	42.95
Future Increase(s): Add $1.00/hr eff. 06/01/2016; Add $1.00/hr eff. 06/01/2017			
Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.			

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Fiber Optic Laborer (Outside, Other Than Concrete Encased)	15.50	0.79	16.29
Railroad Track Laborer	17.50	2.18	19.68
HEAVY EQUIPMENT OPERATORS			
Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.	38.27	21.85	60.12
Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.	37.77	21.85	59.62
Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, VIbratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane WIth a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type);	37.27	21.85	59.12

TRADE OR OCCUPATION	HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
	$	$	$
Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches & A- Frames. Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.			
Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or WIthout Attachments); Telehandler; Tining or Curing Machine. Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.	37.01	21.85	58.86
Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Automatic Belt Conveyor & Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add $1.30/hr on 6/1/2016; Add $1.25/hr on 6/1/2017. Premium Pay: DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add $1.50/hr night work premium. See DOT'S website for details about the applicability of this night work premium at: http://wisconsindot.gov/Pages/doing- bus/civil- rights/labornwage/prevailing- wage- compliance. aspx.	37.27	21.85	59.12
Fiber Optic Cable Equipment.	18.00	0.00	18.00

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: September 2, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1: General Laborer; Tree Trimmer; Conduit Layer; Demolition and Wrecking Laborer; Guard Rail, Fence and Bridge Builder; Landscaper, Multiplate Culvert Assembler; Stone Handler; Bituminous Worker (Shoveler, Loader, Utility Man); Batch Truck Dumper; or Cement Handler; Bituminous Worker; (Dumper, Ironer, Smoother, Tamper); Concrete Handler	$30.67	16.55
Group 2: Air Tool Operator; Joint Sawer and Filler (Pavement); Vibrator or Tamper Operator (Mechanical Hand Operated);	30.77	16.55
Group 3: Bituminous Worker (Raker and Luteman); Formsetter (Curb, Sidewalk, and Pavement); Strike Off man	30.82	16.55
Group 4: Line and Grade Specialist	31.02	16.55
Group 5: Blaster and Powderman	30.87	16.55
Group 6: Flagperson; Traffic Control	27.30	16.55

CLASSES OF LABORER AND MECHANICS

Bricklayer	35.94	17.05
Carpenter	30.48	15.80
Millwright	32.11	15.80
Piledriverman	30.98	15.80
Ironworker	32.85	21.84
Cement Mason/Concrete Finisher	35.61	19.40
Electrician		See Page 3
Line Construction		
Lineman	42.14	32% + 5.00
Heavy Equipment Operator	40.03	32% + 5.00
Equipment Operator	33.71	32% + 5.00
Heavy Groundman Driver	26.78	14.11
Light Groundman Driver	24.86	13.45
Groundsman	23.18	32% + 5.00
Painters	22.03	12.45
Well Drilling:		
Well Driller	16.52	3.70

Truck Drivers:	Basic Hourly Rates	Fringe Benefits
1 & 2 Axles	26.63	19.85
Three or More Axles; Euclids, Dumptor & Articulated, Truck Mechanic	26.78	19.85

Notes: Welders receive rate prescribed for craft performing operation to which welding is incidental. Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)). Includes Modification #0 dated January 8, 2016; Modification #1 dated January 29, 2016; Modification #2 dated February 26, 2016; Modification #3 dated March 11, 2016; Modification #4 dated April 8, 2016; Modification #5 dated June 17, 2016; Modification #6 dated July 1, 2016; Modification #7 dated July 22, 2016; Modification #8 dated July 29, 2016; Modification #9 dated August 19, 2016; Modification #10 dated August 26, 2016; Modification #11 dated September 2, 2016.

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: September 2, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

POWER EQUIPMENT OPERATORS CLASSIFICATION:	Basic Hourly Rates	Fringe Benefits
Group 1: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of over 100 tons or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 176 feet or longer	$39.27	$21.80
Group 2: Cranes, tower cranes and derricks, with or without attachments, with a lifting capacity of 100 tons or less or cranes, tower cranes and derricks with boom, leads and/or jib lengths measuring 175 feet or less, and backhoes (excavators) having a manufacturer's rated capacity of 3 cu. yds. and over, caisson rigs, pile driver, dredge operator, dredge engineer.....	$38.77	$21.80
Group 3: Mechanic or welder - heavy duty equipment, cranes with a lifting capacity of 25 tons or less, concrete breaker (manual or remote); vibrator/sonic concrete breaker; concrete laser screed; concrete slipform paver; concrete batch plant operator; concrete pavement spreader - heavy duty (rubber tired); concrete spreader and distributor, automatic subgrader (concrete); concrete grinder and planing machine; concrete slipform curb and gutter machine; slipform concrete placer; tube finisher; hydro blaster (10,000 psi and over); bridge paver; concrete conveyor system; concrete pump; stabilizing mixer (self propelled); shoulder widener; asphalt plant engineer; bituminous paver; bump cutter and grooving machine; milling machine; screed (bituminous paver); asphalt heater, planer and scarifier; backhoes (excavators) having a manufacturers rated capacity of under 3 cu. yds.; grader or motor patrol; tractor (scraper, dozer, pusher, loader); scraper - rubber tired (single or twin engine); endloader hydraulic backhoe (tractor-type); trenching machine; skid rigs; tractor, side boom (heavy); drilling or boring machine (mechanical heavy); roller (over 5 tons); percussion or rotary drilling machine; air track; blaster; loading machine (conveyor); tugger; boatmen; winches and A-frames; post driver; material hoist operator.	$38.27	$21.80
Group 4: Greaser, roller steel (5 tons or less); roller (pneumatic tired) - self-propelled; tractor (mounted or towed compactors and light equipment); shouldering machine; self-propelled chip spreader; concrete spreader; finishing machine; mechanical float; curing machine; power subgrader; joint saw (multiple blade) belting machine; burlap machine; texturing machine; tractor, endloader (rubber tired) - light; jeep digger; fork lift; mulcher; launch operator; fireman; environmental burner.	$38.01	$21.80
Group 5: Air compressor; power pack; vibratory hammer and extractor; heavy equipment, leadman; tank car heaters; stump chipper; curb machine operator; concrete pro-portioning plants generators; mudjack operator; rock breaker; crusher or screening plant; screed (milling machine); automatic belt conveyor and surge bin; pug mill operator; oiler; pump (over 3 inches); drilling machine helper.....	$37.72	$21.80
Group 6: Off – road material hauler with or without ejector	$31.82	$21.80

Premium Pay:
EPA Level "A" protection - $3.00 per hour
EPA Level "B" protection - $2.00 per hour
EPA Level "C" protection - $1.00 per hours

SUPERSEDES DECISION WI20120010
U. S. DEPARTMENT OF LABOR
(DAVIS-BACON ACT, MINIMUM WAGE RATES)

STATE: Wisconsin
GENERAL DECISION NUMBER: WI160010
DATE: September 2, 2016
DESCRIPTION OF WORK: Highways and Airport Runway and Taxiway Construction

LABORERS CLASSIFICATION:	Rates	Benefits
Electricians		
Area 1	$30.68	17.28
Area 2:		
Electricians	32.00	19.28
Area 3:		
Electrical contracts under $130,000	28.96	18.26
Electrical contracts over $130,000	31.16	18.34
Area 4:	30.50	29.50% + 9.57
Area 5	28.96	24.85% + 9.70
Area 6	37.02	29%+9.77
Area 8		
Electricians	32.45	26.10% + 10.56
Area 9:		
Electricians	36.50	20.39
Area 10	29.64	20.54
Area 11	34.92	25.05
Area 12	34.98	19.89
Area 13	35.13	23.26
Teledata System Installer		
Area 14		
Installer/Technician	24.35	13.15
Sound & Communications		
Area 15		
Installer	16.47	14.84
Technician	26.00	17.70

Area 1 - CALUMET (except township of New Holstein), GREEN LAKE (N. part, including Townships of Berlin, St. Marie and Seneca), MARQUETTE (N. part, including Townships of Crystal Lake, Neshkoro, Newton & Springfield), OUTAGAMIE, WAUPACA, WAUSHARA and WINNEBAGO COUNTIES.

Area 2 - ASHLAND, BARRON, BAYFIELD, BUFFALO, BURNETT, CHIPPEWA, CLARK (except Mayville, Colby, Unity, Sherman, Fremont, Lynn and Sherwood), CRAWFORD, DUNN, EAU CLAIRE, GRANT, IRON, JACKSON, LA CROSSE, MONROE, PEPIN, PIERCE, POLK, PRICE, RICHLAND, RUSK, ST. CROIX, SAWYER, TAYLOR, TREMPEALEAU, VERNON and WASHBURN COUNTIES

Area 3 - FLORENCE (townships of Aurora, Commonwealth, Fern, Florence and Homestead), MARINETTE (Niagara township)

Area 4 - BROWN, DOOR, KEWAUNEE, MANITOWOC (except Schleswig), MARINETTE (Wausauke and area south thereof), OCONTO, MENOMINEE (East of a line 6 miles West of the West boundary of Oconto County), SHAWANO (except area North of Townships of Aniwa and Hutchins) COUNTIES.

Area 5 - ADAMS, CLARK (Colby, Freemont, Lynn, Mayville, Sherman, Sherwood, Unity), FOREST, JUNEAU, LANGLADE, LINCOLN, MARATHON, MARINETTE (Area North of the town of Wausaukee), MENOMINEE (Area West of a line 6 miles West of the West boundary of Oconto County), ONEIDA, PORTAGE, SHAWANO (Area North of the townships of Aniwa and Hutchins), VILAS AND WOOD COUNTIES

Area 6 - KENOSHA COUNTY

Area 8 - DODGE, (Emmet Township only), GREEN, JEFFERSON, LAFAYETTE, RACINE (Burlington township), ROCK and WALWORTH COUNTIES

Area 9 - COLUMBIA, DANE, DODGE, (area west of Hwy. 26, except Chester & Emmet Townships), GREEN LAKE (except townships of Berlin, Seneca and St. Marie), IOWA, MARQUETTE (except townships of Neshkoka, Crystal Lake, Newton and Springfield), and SAUK COUNTIES

Area 10 - CALUMET (Township of New Holstein), DODGE (East of Hwy. 26 including Chester Township), FOND DU LAC, MANITOWOC (Schleswig), and SHEBOYGAN COUNTIES

Area 11 - DOUGLAS COUNTY

Area 12 - RACINE (except Burlington township) COUNTY

Area 13 - MILWAUKEE, OZAUKEE, WASHINGTON and WAUKESHA COUNTIES

Area 14 - Statewide.

Area 15 - DODGE (East of Hwy 26 including Chester Twp, excluding Emmet Twp), FOND DU LAC (Except Waupun), MILWAUKEE, OZAUKEE, MANITOWOC (Schleswig), WASHINGTON, AND WAUKESHA COUNTIES.

FEBRUARY 1999

NOTICE TO BIDDERS
WAGE RATE DECISION

The wage rate decision of the Secretary of Labor which has been incorporated in these advertised specifications is incomplete in that the classifications may be omitted from the Secretary of Labor's decision.

Since the bidder is responsible, independently, for ascertaining area practice with respect to the necessity, or lack of necessity, for the use of these classifications in the prosecution of the work contemplated by this project, no inference may be drawn from the omision of these classifications concerning prevailing area practices relative to their use. Further, this omission will not, per se, be construed as establishing any governmental liability for increased labor cost if it is subsequently determined that such classifications are required.

There may be omissions and/or errors in the federal wage rates. The bidder is responsible for evaluating and determining the correct applicable rate. The higher of state or federal rate will apply.

SCHEDULE OF ITEMS REVISED:

CONTRACT: 20161108025

PROJECT(S): 7575-08-72, 7575-08-73

FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
	SECTION 0001 ROADWAY ITEMS					
0010	201.0120 Clearing	31.000 ID		.		.
0020	201.0220 Grubbing	31.000 ID		.		.
0030	204.0100 Removing Pavement	8,738.000 SY		.		.
0040	204.0130 Removing Curb	37.000 LF		.		.
0050	204.0150 Removing Curb & Gutter	767.000 LF		.		.
0060	204.0155 Removing Concrete Sidewalk	2,820.000 SY		.		.
0070	204.0195 Removing Concrete Bases	39.000 EACH		.		.
0080	204.0210 Removing Manholes	9.000 EACH		.		.
0090	204.0220 Removing Inlets	14.000 EACH		.		.

CONTRACT: 20161108025
PROJECT(S): 7575-08-72, 7575-08-73
FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0100	204.0245 Removing Storm Sewer (size) 01. 12-Inch	1,161.000 LF		.		.
0110	204.0245 Removing Storm Sewer (size) 02. 15-Inch	160.000 LF		.		.
0120	204.9060.S Removing (item description) 01. Metal Pipe Casings	1.000 EACH		.		.
0130	205.0100 Excavation Common	4,788.000 CY		.		.
0140	205.0501.S Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	300.000 TON		.		.
0150	213.0100 Finishing Roadway (project) 01. 7575-08-72	1.000 EACH		.		.
0160	305.0110 Base Aggregate Dense 3/4-Inch	409.000 TON		.		.
0170	305.0120 Base Aggregate Dense 1 1/4-Inch	4,105.000 TON		.		.
0180	405.0100 Coloring Concrete WisDOT Red	168.000 CY		.		.
0190	415.0080 Concrete Pavement 8-Inch	6,778.000 SY		.		.

CONTRACT: 20161108025
PROJECT(S): 7575-08-72, 7575-08-73
FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0200	415.1080 Concrete Pavement HES 8-Inch	289.000 SY		.		.
0210	416.0160 Concrete Driveway 6-Inch	523.000 SY		.		.
0220	416.0260 Concrete Driveway HES 6-Inch	73.000 SY		.		.
0230	416.0508 Concrete Roundabout Truck Apron 8-Inch	379.000 SY		.		.
0240	416.0610 Drilled Tie Bars	75.000 EACH		.		.
0250	416.0620 Drilled Dowel Bars	72.000 EACH		.		.
0260	440.4410 Incentive IRI Ride	1,380.000 DOL		.		.
0270	455.0605 Tack Coat	85.000 GAL		.		.
0280	460.2000 Incentive Density HMA Pavement	250.000 DOL		.		.
0290	460.5224 HMA Pavement 4 LT 58-28 S	368.000 TON		.		.
0300	465.0105 Asphaltic Surface	28.000 TON		.		.

CONTRACT: 20161108025
PROJECT(S): 7575-08-72, 7575-08-73
FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0310	601.0105 Concrete Curb Type A	5.000 LF		.		.
0320	601.0110 Concrete Curb Type D	35.000 LF		.		.
0330	601.0405 Concrete Curb & Gutter 18-Inch Type A	241.000 LF		.		.
0340	601.0409 Concrete Curb & Gutter 30-Inch Type A	702.000 LF		.		.
0350	601.0411 Concrete Curb & Gutter 30-Inch Type D	830.000 LF		.		.
0360	601.0580 Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	330.000 LF		.		.
0370	601.0600 Concrete Curb Pedestrian	136.000 LF		.		.
0380	602.0410 Concrete Sidewalk 5-Inch	20,138.000 SF		.		.
0390	602.0415 Concrete Sidewalk 6-Inch	3,589.000 SF		.		.
0400	602.0515 Curb Ramp Detectable Warning Field Natural Patina	474.000 SF		.		.
0410	602.1000 Concrete Loading Zone	397.000 SF		.		.

CONTRACT: 20161108025
PROJECT(S): 7575-08-72, 7575-08-73
FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0420	602.1500 Concrete Steps	25.000 SF		.		.
0430	608.0312 Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	316.000 LF		.		.
0440	608.0315 Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	228.000 LF		.		.
0450	608.0318 Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	239.000 LF		.		.
0460	608.0330 Storm Sewer Pipe Reinforced Concrete Class III 30-Inch	489.000 LF		.		.
0470	608.0336 Storm Sewer Pipe Reinforced Concrete Class III 36-Inch	537.000 LF		.		.
0480	608.0342 Storm Sewer Pipe Reinforced Concrete Class III 42-Inch	157.000 LF		.		.
0490	608.0412 Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	457.000 LF		.		.
0500	608.0415 Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	120.000 LF		.		.
0510	608.0418 Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	117.000 LF		.		.
0520	611.0624 Inlet Covers Type H	7.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0530	611.0639 Inlet Covers Type H-S	17.000 EACH		.		.
0540	611.0652 Inlet Covers Type T	3.000 EACH		.		.
0550	611.1004 Catch Basins 4-FT Diameter	4.000 EACH		.		.
0560	611.1230 Catch Basins 2x3-FT	21.000 EACH		.		.
0570	611.2004 Manholes 4-FT Diameter	4.000 EACH		.		.
0580	611.2005 Manholes 5-FT Diameter	7.000 EACH		.		.
0590	611.2006 Manholes 6-FT Diameter	2.000 EACH		.		.
0600	611.2007 Manholes 7-FT Diameter	1.000 EACH		.		.
0610	611.9710 Salvaged Inlet Covers	2.000 EACH		.		.
0620	612.0902.S Insulation Board Polystyrene (inch) 01. 2-Inch	288.000 SY		.		.
0630	619.1000 Mobilization	1.000 EACH		.		.

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PROJECT(S): 7575-08-72, 7575-08-73
FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0640	620.0300 Concrete Median Sloped Nose	200.000 SF		.		.
0650	624.0100 Water	122.000 MGAL		.		.
0660	625.0100 Topsoil	1,656.000 SY		.		.
0670	628.1905 Mobilizations Erosion Control	5.000 EACH		.		.
0680	628.1910 Mobilizations Emergency Erosion Control	3.000 EACH		.		.
0690	628.7005 Inlet Protection Type A	28.000 EACH		.		.
0700	628.7015 Inlet Protection Type C	28.000 EACH		.		.
0710	629.0210 Fertilizer Type B	1.050 CWT		.		.
0720	631.0300 Sod Water	26.900 MGAL		.		.
0730	631.1000 Sod Lawn	960.000 SY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0740	632.0101 Trees (species) (size) (root) 01. Hawthorne, 'Winter King' (Shrub Tree Form), B&B, 8 - Foot Ht.	3.000 EACH		.		.
0750	632.0201 Shrubs (species) (size) (root) 01. Juniper, Pfitzer 'Kallay's Compact', Container, 24-Inch Spread	21.000 EACH		.		.
0760	632.9101 Landscape Planting Surveillance and Care Cycles	26.000 EACH		.		.
0770	634.0612 Posts Wood 4x6-Inch X 12-FT	8.000 EACH		.		.
0780	634.0614 Posts Wood 4x6-Inch X 14-FT	8.000 EACH		.		.
0790	634.0616 Posts Wood 4x6-Inch X 16-FT	3.000 EACH		.		.
0800	637.2210 Signs Type II Reflective H	376.780 SF		.		.
0810	637.2230 Signs Type II Reflective F	122.500 SF		.		.
0820	638.2602 Removing Signs Type II	18.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0830	638.3000 Removing Small Sign Supports	2.000 EACH		.		.
0840	638.3100 Removing Structural Steel Sign Supports	3.000 EACH		.		.
0850	642.5001 Field Office Type B	1.000 EACH		.		.
0860	643.0100 Traffic Control (project) 01. 7575-08-72	1.000 EACH		.		.
0870	643.0410 Traffic Control Barricades Type II	2,614.000 DAY		.		.
0880	643.0420 Traffic Control Barricades Type III	5,959.000 DAY		.		.
0890	643.0705 Traffic Control Warning Lights Type A	7,176.000 DAY		.		.
0900	643.0900 Traffic Control Signs	6,097.000 DAY		.		.
0910	643.2000 Traffic Control Detour (project) 01. 7575-08-72	1.000 EACH		.		.
0920	643.3000 Traffic Control Detour Signs	8,715.000 DAY		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0930	644.1420.S Temporary Pedestrian Surface Plywood	681.000 SF		.		.
0940	644.1601.S Temporary Curb Ramp	14.000 EACH		.		.
0950	644.1616.S Temporary Pedestrian Safety Fence	3,400.000 LF		.		.
0960	645.0111 Geotextile Type DF Schedule A	12,580.000 SY		.		.
0970	646.0106 Pavement Marking Epoxy 4-Inch	4,142.000 LF		.		.
0980	646.0126 Pavement Marking Epoxy 8-Inch	2,531.000 LF		.		.
0990	646.0156 Pavement Marking Epoxy 18-Inch	67.000 LF		.		.
1000	646.0600 Removing Pavement Markings	413.000 LF		.		.
1010	647.0166 Pavement Marking Arrows Epoxy Type 2	8.000 EACH		.		.
1020	647.0206 Pavement Marking Arrows Bike Lane Epoxy	6.000 EACH		.		.
1030	647.0256 Pavement Marking Symbols Epoxy	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1040	647.0306 Pavement Marking Symbols Bike Lane Epoxy	12.000 EACH		.		.
1050	647.0336 Pavement Marking Symbols Bike Shared Lane Epoxy	6.000 EACH		.		.
1060	647.0456 Pavement Marking Curb Epoxy	60.000 LF		.		.
1070	647.0566 Pavement Marking Stop Line Epoxy 18-Inch	180.000 LF		.		.
1080	647.0606 Pavement Marking Island Nose Epoxy	6.000 EACH		.		.
1090	647.0656 Pavement Marking Parking Stall Epoxy	82.000 LF		.		.
1100	647.0706 Pavement Marking Diagonal Epoxy 6-Inch	51.000 LF		.		.
1110	647.0726 Pavement Marking Diagonal Epoxy 12-Inch	231.000 LF		.		.
1120	647.0776 Pavement Marking Crosswalk Epoxy 12-Inch	1,079.000 LF		.		.
1130	650.4000 Construction Staking Storm Sewer	42.000 EACH		.		.
1140	650.4500 Construction Staking Subgrade	2,552.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1150	650.5000 Construction Staking Base	525.000 LF		.		.
1160	650.5500 Construction Staking Curb Gutter and Curb & Gutter	830.000 LF		.		.
1170	650.7000 Construction Staking Concrete Pavement	2,026.000 LF		.		.
1180	650.8500 Construction Staking Electrical Installations (project) 01. 7575-08-72	LUMP	LUMP			.
1190	650.9910 Construction Staking Supplemental Control (project) 01. 7575-08-72	LUMP	LUMP			.
1200	650.9920 Construction Staking Slope Stakes	2,552.000 LF		.		.
1210	652.0225 Conduit Rigid Nonmetallic Schedule 40 2-Inch	4,129.000 LF		.		.
1220	652.0235 Conduit Rigid Nonmetallic Schedule 40 3-Inch	1,304.000 LF		.		.
1230	653.0140 Pull Boxes Steel 24x42-Inch	31.000 EACH		.		.
1240	653.0905 Removing Pull Boxes	12.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1250	654.0102 Concrete Bases Type 2	4.000 EACH		.		.
1260	654.0217 Concrete Control Cabinet Bases Type 9 Special	1.000 EACH		.		.
1270	654.0230 Concrete Control Cabinet Bases Type L30	1.000 EACH		.		.
1280	655.0230 Cable Traffic Signal 5-14 AWG	448.000 LF		.		.
1290	655.0250 Cable Traffic Signal 9-14 AWG	569.000 LF		.		.
1300	655.0260 Cable Traffic Signal 12-14 AWG	577.000 LF		.		.
1310	655.0305 Cable Type UF 2-12 AWG Grounded	676.000 LF		.		.
1320	655.0515 Electrical Wire Traffic Signals 10 AWG	933.000 LF		.		.
1330	655.0610 Electrical Wire Lighting 12 AWG	4,362.000 LF		.		.
1340	655.0615 Electrical Wire Lighting 10 AWG	5,218.000 LF		.		.
1350	655.0630 Electrical Wire Lighting 4 AWG	7,641.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1360	655.0635 Electrical Wire Lighting 2 AWG	2,609.000 LF		.		.
1370	655.0900 Traffic Signal EVP Detector Cable	128.000 LF		.		.
1380	656.0200 Electrical Service Meter Breaker Pedestal (location) 01. CB100	LUMP	LUMP			.
1390	656.0200 Electrical Service Meter Breaker Pedestal (location) 02. CB1	LUMP	LUMP			.
1400	658.0110 Traffic Signal Face 3-12 Inch Vertical	8.000 EACH		.		.
1410	658.0155 Traffic Signal Face 3-12 Inch Horizontal	4.000 EACH		.		.
1420	658.0215 Backplates Signal Face 3 Section 12-Inch	12.000 EACH		.		.
1430	658.0416 Pedestrian Signal Face 16-Inch	8.000 EACH		.		.
1440	658.0600 Led Modules 12-Inch Red Ball	12.000 EACH		.		.
1450	658.0605 Led Modules 12-Inch Yellow Ball	12.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1460	658.0610 Led Modules 12-Inch Green Ball	12.000 EACH		.		.
1470	658.0635 Led Modules Pedestrian Countdown Timer 16-Inch	8.000 EACH		.		.
1480	658.5069 Signal Mounting Hardware (location) 01. STH 16 & 5TH Avenue S	LUMP	LUMP			.
1490	659.2130 Lighting Control Cabinets 120/240 30-Inch	1.000 EACH		.		.
1500	678.0200 Fiber Optic Splice Enclosure	2.000 EACH		.		.
1510	678.0300 Fiber Optic Splice	2.000 EACH		.		.
1520	690.0150 Sawing Asphalt	594.000 LF		.		.
1530	690.0250 Sawing Concrete	993.000 LF		.		.
1540	715.0415 Incentive Strength Concrete Pavement	1,897.000 DOL		.		.
1550	999.1000.S Seismograph	LUMP	LUMP			.
1560	999.1500.S Crack and Damage Survey	LUMP	LUMP			.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1570	ASP.1T0A On-the-Job Training Apprentice at $5.00/HR	600.000 HRS		.		.
1580	ASP.1T0G On-the-Job Training Graduate at $5.00/HR	300.000 HRS		.		.
1590	SPV.0035 Special 60. Planting Mixture	750.000 CY		.		.
1600	SPV.0060 Special 01. Catch Basins 4-FT Diameter Special	3.000 EACH		.		.
1610	SPV.0060 Special 02. Posts Steel U-Channel 10-FT	23.000 EACH		.		.
1620	SPV.0060 Special 03. Posts Steel U-Channel 12-FT	10.000 EACH		.		.
1630	SPV.0060 Special 04. Install V-Loc Post Anchors	33.000 EACH		.		.
1640	SPV.0060 Special 05. Install Manhole Covers	13.000 EACH		.		.
1650	SPV.0060 Special 06. Salvaged Metal Railing	1.000 EACH		.		.
1660	SPV.0060 Special 20. Corporation Stop 1-Inch	15.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1670	SPV.0060 Special 21. Corporation Stop 1 1/4-Inch	1.000 EACH		.		.
1680	SPV.0060 Special 22. Corporation Stop 1 1/2-Inch	2.000 EACH		.		.
1690	SPV.0060 Special 23. Curb Stop 1-Inch	15.000 EACH		.		.
1700	SPV.0060 Special 24. Curb Stop 1 1/4-Inch	1.000 EACH		.		.
1710	SPV.0060 Special 25. Curb Stop 1 1/2-Inch	2.000 EACH		.		.
1720	SPV.0060 Special 26. Service Tap 4-Inch	1.000 EACH		.		.
1730	SPV.0060 Special 27. Service Valve 4-Inch	1.000 EACH		.		.
1740	SPV.0060 Special 28. Hydrant	4.000 EACH		.		.
1750	SPV.0060 Special 29. Hydrant Control Valve 6-Inch	4.000 EACH		.		.
1760	SPV.0060 Special 30. Nitrile Gaskets-Hydrant Lead 6-Inch	3.000 EACH		.		.
1770	SPV.0060 Special 31. Salvage Hydrant	3.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1780	SPV.0060 Special 32. R S Wedge Valve 16-Inch	1.000 EACH		.		.
1790	SPV.0060 Special 33. R S Wedge Valve 12-Inch	10.000 EACH		.		.
1800	SPV.0060 Special 34. R S Wedge Valve 8-Inch	1.000 EACH		.		.
1810	SPV.0060 Special 35. R S Wedge Valve 6-Inch	3.000 EACH		.		.
1820	SPV.0060 Special 36. Connect to Existing 16-Inch Water Main/Valve	2.000 EACH		.		.
1830	SPV.0060 Special 37. Connect to Existing 12-Inch Water Main	1.000 EACH		.		.
1840	SPV.0060 Special 38. Connect to Existing 8-Inch Water Main	2.000 EACH		.		.
1850	SPV.0060 Special 39. Connect to Existing 6-Inch Water Main	3.000 EACH		.		.
1860	SPV.0060 Special 40. Line Stop 16-Inch	1.000 EACH		.		.
1870	SPV.0060 Special 41. Reducer 12 to 8-Inch	1.000 EACH		.		.
1880	SPV.0060 Special 42. Reducer 12 to 6-Inch	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1890	SPV.0060 Special 43. Cross 12 x 16-Inch	1.000 EACH		.		.
1900	SPV.0060 Special 44. Tee 12 x 12-Inch	1.000 EACH		.		.
1910	SPV.0060 Special 45. Tee 12 x 8-Inch	1.000 EACH		.		.
1920	SPV.0060 Special 46. Tee 12 x 6-Inch	5.000 EACH		.		.
1930	SPV.0060 Special 47. 45 Degree Bend 12-Inch	12.000 EACH		.		.
1940	SPV.0060 Special 48. 45 Degree Bend 6-Inch	8.000 EACH		.		.
1950	SPV.0060 Special 49. Nitrile Gasket 12-Inch	12.000 EACH		.		.
1960	SPV.0060 Special 50. Nitrile Gasket 6-Inch	7.000 EACH		.		.
1970	SPV.0060 Special 51. Manhole 60-Inch I.D.	4.000 EACH		.		.
1980	SPV.0060 Special 52. Manhole 96-Inch I.D.	1.000 EACH		.		.
1990	SPV.0060 Special 53. Water Service Manifold	1.000 EACH		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2000	SPV.0060 Special 60. Remove Existing Lighting Control	2.000 EACH		.		.
2010	SPV.0060 Special 61. Salvage Street Light Assembly	27.000 EACH		.		.
2020	SPV.0060 Special 62. Reinstall Decorative Street Light Assembly	2.000 EACH		.		.
2030	SPV.0060 Special 63. Decorative Base Type A	20.000 EACH		.		.
2040	SPV.0060 Special 64. Decorative Base Type B	4.000 EACH		.		.
2050	SPV.0060 Special 65. Decorative Street Light Assembly Type A	20.000 EACH		.		.
2060	SPV.0060 Special 66. Decorative Street Light Assembly Type B	4.000 EACH		.		.
2070	SPV.0060 Special 67. Decorative Traffic Signal Assembly Type C	4.000 EACH		.		.
2080	SPV.0060 Special 68. Perennials, Feather Reed Grass karl Foerster CG 1 Gal	137.000 EACH		.		.
2090	SPV.0060 Special 69. Perennials, Prairie Dropseed CG 1 Gal	275.000 EACH		.		.

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2100	SPV.0090 Special 01. Concrete Curb & Gutter Integral 24-Inch Type D	1,707.000 LF		.		.
2110	SPV.0090 Special 02. Concrete Curb & Gutter HES Integral 24-Inch Type D	115.000 LF		.		.
2120	SPV.0090 Special 03. Concrete Curb & Gutter 24-Inch Type A	24.000 LF		.		.
2130	SPV.0090 Special 04. Concrete Curb & Gutter 30-Inch Type A Full Depth	450.000 LF		.		.
2140	SPV.0090 Special 05. Salvaged Decorative Fence	8.000 LF		.		.
2150	SPV.0090 Special 06. Storm Sewer Pipe PVC 6-Inch	8.000 LF		.		.
2160	SPV.0090 Special 07. Storm Sewer Pipe PVC 12-Inch	68.000 LF		.		.
2170	SPV.0090 Special 20. Copper Water Service 1-Inch	495.000 LF		.		.
2180	SPV.0090 Special 21. Copper Water Service 1 1/4-Inch	46.000 LF		.		.
2190	SPV.0090 Special 22. Copper Water Service 1 1/2-Inch	59.000 LF		.		.

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	SPV.0090 Special 23.					
2200	Ductile Iron Water Service 4-Inch	15.000 LF		.		.
	SPV.0090 Special 24.					
2210	Ductile Iron Water Main 16-Inch	110.000 LF		.		.
	SPV.0090 Special 25.					
2220	Ductile Iron Water Main 12-Inch	1,453.000 LF		.		.
	SPV.0090 Special 26.					
2230	Ductile Iron Water Main 8-Inch	108.000 LF		.		.
	SPV.0090 Special 27.					
2240	Ductile Iron Water Main 6-Inch	105.000 LF		.		.
	SPV.0090 Special 28.					
2250	Ductile Iron Hydrant Lead 6-Inch	62.000 LF		.		.
	SPV.0090 Special 29.					
2260	Sanitary Sewer 12-Inch	40.000 LF		.		.
	SPV.0090 Special 30.					
2270	Sanitary Sewer 15-Inch	20.000 LF		.		.
	SPV.0090 Special 31.					
2280	Sanitary Sewer 18-Inch	20.000 LF		.		.
	SPV.0090 Special 32.					
2290	Sanitary Sewer 20-Inch	40.000 LF		.		.
	SPV.0090 Special 60.					
2300	Fiber Optic Tracer Cable	2,604.000 LF		.		.

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2310	SPV.0090 Special 61. Fiber Optic Warning Tape	1,629.000 LF		.		.
2320	SPV.0090 Special 62. Fiber OpticCable Outdoor Plant 12-CT	2,372.000 LF		.		.
2330	SPV.0090 Special 63. Furnish & Install Equivalent Lighting Conductors	3,222.000 LF		.		.
2340	SPV.0105 Special 01. Concrete Pavement Joint Layout	LUMP	LUMP			.
2350	SPV.0105 Special 02. Construction Staking Roundabout Sidewalks	LUMP	LUMP			.
2360	SPV.0105 Special 60. Traffic Signal Communication Systems Integration	LUMP	LUMP			.
2370	SPV.0105 Special 61. Remove Traffic Signal (STH 16 & 5TH Avenue South)	LUMP	LUMP			.
2380	SPV.0105 Special 62. Remove Traffic Signal (STH 16 & 7TH Street)	LUMP	LUMP			.
2390	SPV.0105 Special 63. Furnish & Install Traffic Signal Cabinet And Controller (STH 16 & 5TH Ave	LUMP	LUMP			.

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FEDERAL ID(S): WISC 2016414, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2400	SPV.0105 Special 64. Remove And Salvage EVP Equipment (STH 16 & 5th Avenue South)	LUMP	LUMP			.
2410	SPV.0165 Special 01. Permeable Interlocking Concrete Pavers	9,102.000 SF	.			.
2420	SPV.0180 Special 60. Shredded Hardwood Bark Mulch	500.000 SY	.			.
	SECTION 0001 TOTAL					.
	TOTAL BID					.

PLEASE ATTACH SCHEDULE OF ITEMS HERE